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ENERGY CONSUMPTION IN ATLANTIC CANADA

1961-81

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ENERGY POLICY DIVISION

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1961-81

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PART I

INTRODUCTION AND METHODOLOGY

Regional data on energy consumption in Canada have been published for over two decades. Data for the period 1958-77 are found in Statistics Canada's "Detailed Energy Supply and Demand in Canada", (Cat. No. 57-505 for 1958-69 and Cat. No. 57-207 for 1970-77), and for the period 1978-81 in Statistics Canada's "Quarterly Report on Energy Supply-Demand in Canada", (Cat. No. 57-003). The methodology employed in those publications, however, was not maintained constant through time and therefore a consistent historical series on energy consumption in Atlantic Canada is not readily available. For the period 1958-77 energy consumption in farming and in the residential sector is recorded as a combined total; moreover, the allocation of energy use by sector is performed in accordance with the rate structure of the distribution utilities rather than by type of user (i.e. residential, industrial, etc.).

For the period 1978-81 energy consumption in the residential sector is listed separately from farming; also energy consumption is measured by type of user as estimated through surveys of final users. In order to develop a consistent series for energy use through time, the data for 1961-77 were adjusted in conformity with the definition applicable for the period 1978-81 (adjustments were necessary for electricity, natural gas, diesel fuel, LPG, and heavy fuel oil). Neither set of Statistics Canada publications includes wood and wood residue in the energy supply-demand balance. Yet a number of surveys* have shown that in the past few years wood has provided an increasing share of space heating requirements in some provinces. Moreover, Statistics Canada's Household Facilities and Equipment (Cat. No. 64-202) shows that the number of households using wood as principal heating

fuel followed a U shaped pattern during the past twenty years, first falling during the sixties and early seventies (a pattern similar to coal use), and then increasing shortly after the 1973 oil crisis. The exclusion of wood with a saucer shaped use pattern would result in an overstatement of the growth rate of energy consumption during the 1961-72 period and an understatement in the following period. It would also result in an inflated estimate of the degree of "energy conservation". In the data base employed in this paper a series for wood consumption is explicitly included although its development involved the use of incomplete data in certain years. The amount of wood use in the residential sector was calculated as the product of the number of households using wood (derived from the data in Statistics Canada Cat. No. 64-202) and an average quantity of wood consumed per household (derived from provincial surveys).

Data kindly provided by the Canadian Pulp and Paper Association indicate that the pulp and paper industry used a substantial amount of wood residue as an energy source. The CPPA's information was included in the energy supply-demand balances for the industrial sector. The time series for energy consumption in Atlantic Canada contained in this report, therefore, is more complete than that found in Statistics Canada's publications (as it includes the use of wood and wood residue), and the allocation of energy consumption among economic sectors is based on a consistent methodology throughout the entire period.

Statistics Canada publishes data on energy consumption both in natural units and energy units (BTUs for 1958-77 and joules for 1978-81). The energy unit series has a major shortcoming; in the conversion from natural to energy units, electricity at end-use is assigned 3.6 TJ per GWH while all other energy sources are valued in terms of their primary energy content. This practice of applying end-use conversion factors to all other energy forms produces inconsistent time series for periods where there are shifts to (from) electricity from (to) other energy sources. A similar inconsistency, though in the opposite direction, results if electricity is valued in terms of the primary energy equivalent of thermal generation, i.e. 10.5 TJ per GWH. The following simple example will illustrate the point.

Let us consider a residential building complex that uses 1,000 barrels of light fuel oil (LFO) per heating season, equivalent to 6.15 TJ. If the oil furnace has an average seasonal efficiency of 58.5 per cent, the net amount of energy delivered for space heating is 3.6 TJ. The households in that complex therefore use 6.15 TJ worth of LFO to gain 3.6 TJ worth of space heating. Let us assume now that the heating system in the above residential complex is converted from oil to electricity. In this case, the households will purchase one GWH of electricity (3.6 TJ) to receive 3.6 TJ worth of space heating. Thus, under either heating system the residential complex's heating requirements (i.e. the net use of energy) are 3.6 TJ; yet, in official statistics a change in heating systems with constant net energy use would be recorded

as a reduction in energy consumption from 6.15 to 3.6 TJ (or an increase from 6.15 TJ to 10.5 TJ if electricity is valued at the equivalent of thermal generation). In order to derive a consistent time series on energy consumption, the additional electricity used as a result of conversion from other energy sources should not be valued as 3.6 TJ or 10.5 TJ per GWH, but in terms of the primary energy it replaces, in the above case 6.15 TJ per GWH. This approach, however, would in practice require a time series for interfuel substitution and would involve a two-tier set of conversion factors for electricity. The variant of assigning a fixed value, say 6.15 TJ per GWH, to all electricity use would result in a gross overstatement of electricity use in energy units.

A simpler and more direct method requires focusing on the net energy requirements rather than the energy content of various sources of energy. The series for net energy use can be derived by multiplying the primary energy content of each energy source by the degree of efficiency of the heating system. The efficiency factors used are shown in Table I-1 and the data so derived are termed net energy as opposed to gross energy for the conventional approach. For the reader's convenience, both sets of data are included in Part IV, but the analysis of energy consumption by sector is performed with the use of net energy data.

In certain sectors of the economy a large portion of the energy consumed is affected by fluctuations in climatic conditions. For analysis purposes one would ideally need a weather-free series for energy consumption. Eliminating the influence of the weather on energy use is a complex task. First, it is necessary to identify the areas of energy use affected by weather conditions; second, one must develop an appropriate index of weather conditions for energy consumption purposes. The existing climatic indexes are not very suitable for deweathering energy use data; they are based on average daily temperatures only, and involve only large temperature blocks (degree days below 18.0 degrees Celcius for the heating season). Because of the above problems we did not attempt to develop a series for deweathered net energy use.

Although the appropriate concept of energy use is net energy, it must be realized that energy is generally not available in a form that can be directly used to perform work and produce utility. Instead energy must go through a number of steps before it reaches the final user and performs the required task, and each of those steps involves some energy loss. In the process of performing a certain amount of work a large portion of energy is destroyed through consumption by the energy producers, losses in the conversion from one form of energy into another, and through inefficiencies in the energy-using appliances and equipment.

This flow from primary energy to net energy is not shown in the current energy balances. Conversion losses in the generation of

electricity are ignored as electricity consumption is recorded on a net basis, and the energy use by sector includes, in one sum, both net energy use and conversion losses. The published figures on sectoral energy use therefore provide no information on the net energy requirements of each sector, and the often used shares of energy use by sector have limited usefulness for policy purposes.

In order to provide a more meaningful interpretation of the patterns of energy consumption in Atlantic Canada we present, in Part III, a brief analysis of the relationship between primary energy and net energy.

Finally, we have included a historical series on energy prices in Atlantic Canada; in order to facilitate comparisons, the price data are presented both in nominal terms and in real terms per net energy unit, i.e. in current dollars per natural unit and constant (1971) dollars per net gigajoule of energy.

TABLE I-1

UTILIZATION EFFICIENCY FACTORS
(%)

	Residential	Commercial	Industrial	Transportation			
				Road	Rail	Air	Marine
Coal, Coke	50	65	87	-	8	-	8
LPG	75	78	85	-	-	-	-
Still Gas	-	-	85	-	-	-	-
Kerosene	55	82	82	-	55	-	55
Diesel Oil	23	23	26	23	23	-	15
Light Fuel Oil	65	82	82	-	82	-	10
Heavy Fuel Oil	80	80	87	-	80	-	10
Motor Gasoline	-	-	-	20	-	-	-
Aviation Gas	-	-	-	-	-	20	-
Aviation Turbofuel	-	-	-	-	-	30	-
Natural Gas	75	78	85	-	-	-	-
Electricity	100	100	100	-	-	-	-
Petroleum Coke	-	-	87	-	-	-	-
Crude Oil	-	-	87	-	-	-	-
Coke Oven Gas	-	-	85	-	-	-	-
Wood and Wood Residue	50	50	50	-	-	-	-

Source: Energy, Mines and Resources Canada, Energy Demand Projections, A Total Energy Approach (Ottawa, 1977), p. 28; Author's estimates.

PART II

TRENDS IN ENERGY CONSUMPTION

A. RESIDENTIAL SECTOR

1. Demographic and Economic Trends

a. The 1961-72 Period

During the 1961-72 period the population of the Atlantic region increased at an average annual rate of 0.8 per cent, reaching the 2.077 million mark in 1972. Household formation grew at more than twice that pace (1.9 per cent annually) and as a result the size of the average household fell from 4.5 members in 1961 to 4.0 members in 1972.

While it was becoming smaller, the average household in Atlantic Canada was getting more affluent. Real personal disposable income (PDI in 1971 dollars) advanced at an average annual rate of 3.3 per cent, increasing from $ 6,279 in 1961 to $ 9,012 in 1972.

The steady decline in the size of the average household and the gains in real purchasing power did not alter significantly the attitude of households towards home-ownership. The proportion of single detached dwellings fell from 77.1 per cent to 71.6 per cent between 1961 and 1972 while the share of owner-occupied dwellings decreased moderately from 76.4 per cent to 72.9 per cent during the same period. Throughout the 1960s, therefore, households in Atlantic Canada maintained a strong preference for the ownership of single detached dwellings.

b. The 1973-81 Period

The population of Atlantic Canada continued its slow growth in the 1970s, recording a net increase of only 157,000 in nearly a decade. On the other hand, the pace of household formation speeded up considerably and the number of households increased at

an average of nearly three per cent per year. The combination of rapid growth in household formation and slow growth in population resulted in an accelerated decrease in the size of the average household from 4.0 members in 1972 to 3.3 members in 1981.

The most significant economic change in the 1970s was the virtual stagnation in household real income. During a nine year span the average household in Atlantic Canada saw its real PDI increase by only $ 671.

The pattern of home-ownership also remained very stable. The proportion of single detached dwellings was unchanged from its 1972 level of 71.6 per cent and the share of owner-occupied dwellings edged slightly upwards to a level of 74.3 per cent in 1981.

2. Trends in Energy Prices

a. The 1961-72 Period

The nominal price of heating oil increased at the moderate rate of 2.8 per cent per year moving from 3.9¢ per litre in 1961 to 5.3¢ per litre in 1972; the rate of inflation, however, proceeded at a faster rate and as a result the real price of heating oil fell by 4.8 per cent between 1961 and 1972.

Electric utilities in the Atlantic region applied a declining block rate structure to residential customers. This resulted in a lower price per kwh for large electricity users (primarily households with electric space heating). The trend in electricity prices during the 1961-72 period, both in nominal and real terms, was downward for small and large residential electricity customers; for the

former, real electricity prices fell by 34.1 per cent and for the latter by nearly 40 per cent.

b. The 1973-81 Period

The price of heating oil rose by nearly fivefold since 1972, reaching the level of 25.0¢ per litre in 1981. This represented a doubling of real heating oil prices for residential customers.

The price of electricity also increased, but not as fast as heating oil. The cost of one kwh of electricity use by residential customers rose from 1.8¢ to 5.2¢ for small users (lighting and appliances) and from 1.3¢ to 3.9¢ for large users (space heating). Most of the nominal increase in electricity prices, however, was due to inflation. Real electricity prices increased at fairly moderate rates during this period, recording average annual growth rates of 2.5 per cent for small users and 3.4 per cent for large users; in both cases, however, real electricity prices were lower in 1981 than twenty years earlier.

3. Trends in Energy Use

a. The 1961-72 Period

During the 1961-72 period, net energy consumption in the residential sector increased at an average annual rate of 5.8 per cent rising from 46.8 petajoules (PJ) in 1961 to 86.9 PJ in 1972. Since population and households grew at a slower rate during the same period, energy use per capita and per household edged steadily upwards. From 1961 to 1972 per capita energy consumption increased

from 24.7 gigajoules (GJ) to 41.9 GJ, while energy use per household rose more slowly from 111.6 GJ to 167.2 GJ. Real personal disposable income per household nearly kept pace with household energy consumption and energy use per $ 1,000 of real PDI moved slightly upwards from 17.8 GJ to 18.6 GJ.

The real prices of the two major energy sources, heating oil and electricity, followed a negative trend in the 1961-72 period, but at different rates. While the price of a net GJ of heating oil decreased by a modest 3.1 per cent, the price of a corresponding unit of electricity (for space heating) dropped by 35.1 per cent. However, in 1972 heating oil, at $ 2.18 per net GJ, was still cheaper for space heating than electricity ($ 3.42 per net GJ).

The low and decreasing price of heating oil provided a strong incentive for households in Atlantic Canada to modernize their heating systems and reduce the consumption of solid fuel (wood and coal). During the 1961-72 period, the proportion of households using oil as a primary heating fuel jumped from 52.7 per cent to 88.3 per cent, while the share of solid-fuel using households plunged from 46.6 per cent to 8.4 per cent. Electricity made some inroads in the space heating market but its share of households remained an insignificant 3.9 per cent in 1972.

The shift in the distribution of primary heating fuels was parallelled by similar changes in the pattern of energy consumption by fuel. The average household in the Atlantic

region consumed 111.6 GJ of energy in 1961; 64.3 per cent of that amount was provided by oil products, 27.0 per cent by solid fuel, 8.6 per cent by electricity and a negligible amount by natural gas (used only in Moncton, NB). By 1972 average household energy requirements had increased to 167.2 GJ distributed among the various energy sources as follows: oil products 81.9 per cent, electricity 13.4 per cent, and solid fuel 4.7 per cent (natural gas use remained at an insignificant level).

The most significant change in the pattern of residential energy consumption in Atlantic Canada during the 1961-72 period, therefore, was a massive conversion from solid fuel (whose use was nearly eliminated by 1972) to oil.

b. The 1973-81 Period

During the nine-year span from 1972 to 1981, the world economy was subjected to two rounds of oil price explosions. The first shock, which occurred in 1973-74, pushed the price of the OPEC marker from less that $ 2 per barrel in 1972 to over $ 9 per barrel in 1974. The second round of oil price increases in 1979-80 raised the OPEC marker by almost $ 20 per barrel to a level of $ 32 per barrel by the end of 1980. Canadian oil prices followed a more stable upward trend. Nonetheless, the cost of crude oil to domestic refineries rose from about $ 2 per barrel in 1972 to over $ 20 per barrel by the end of 1980.

As a result of those leapfrogging increases in crude oil prices, the real price of a net GJ of heating oil more than doubled

between 1972 and 1981. The price of electricity also followed an upward trend but at a slower pace. Because of the different growth rates, the gap between the price of heating oil and electricity narrowed considerably during the 1972-81 period; by 1981 a net GJ of heating oil at $ 4.2 (in constant dollars) was almost as expensive as a corresponding unit of electricity for space heating, which cost $ 4.5 in constant dollars.

In theory one expects a twofold reaction by households to such a rapid escalation of real average energy prices and so large a shift in relative prices: those consumers already using the energy source with the fastest expected decline in relative prices can minimize expenditures on energy only by reducing the amount used; all other consumers can reduce energy costs through various combinations of lower energy consumption and shifts in the mix of energy sources. On the aggregate, therefore, one should observe both a shift in the trend of average household energy use and a substantial degree of interfuel substitution. The observed behaviour of household energy consumption in the Atlantic Region followed the expected pattern.

Net residential energy use, which had increased at an average annual rate of 5.8 per cent during the 1961-72 period, actually fell by 16.4 per cent from 1972 to 1981. Part of this decline was caused by the accelerated reduction of the average family size and the rest by non-demographic factors - primarily high real energy prices, stagnant real incomes and changes in lifestyle.

Per capita energy consumption reversed the upward drift of the previous decade and embarked upon a decreasing path dropping from 41.9 GJ in 1972 to 32.5 GJ in 1981. A falling energy/population ratio coupled with a shrinking household size produced a steady decline in energy use per household from 160.3 GJ to 107.7 GJ during the same period.

The ratio of energy use to real PDI also fell; energy consumption per $ 1,000 of real income dropped from 18.6 GJ in 1972 to 11.1 GJ in 1981.

The pace of interfuel substitution accelerated in the second part of the seventies and followed the pattern of change in relative prices. The proportion of households using oil as primary heating fuel fell from 88.3 per cent in 1972 to 68.8 per cent in 1981. The major beneficiaries of oil's shrinking role were electricity, whose share rose from 3.9 per cent to 19.3 per cent, and solid fuel (up from 8.4 per cent to 11.8 per cent).

Similar shifts also took place in the pattern of energy consumption. Although the average household in Atlantic Canada used 96.5 per cent as much energy in 1981 than in 1961 (however with 3.3 instead of 4.5 members), the energy mix differed significantly. The share of oil products, which had exceeded the 80 per cent mark in 1972, plunged to 56.0 per cent during the following ten years. The consumption of electricity, which accounted for less than one tenth of the total in 1961 and about one seventh in 1972, increased rapidly in the 1970s reaching a 32.3 per cent share in 1981. Solid fuel reversed its downward trend in the 1960s and in 1981 satisfied 11.7 per cent of the total net energy requirements of the residential sector.

TABLE II-1. SELECTED ECONOMIC INDICATORS FOR THE RESIDENTIAL SECTOR: SELECTED YEARS, 1961-81

	1961[a]	1966[a]	1971[a]	1972[b]	1976[a]	1981[a]	Average Annual % Change	
							1961-72	1972-81
Population 000s	1,897.4	1,974.7	2,057.3	2,077.3	2,181.8	2,234.0	.8	.8
Households	419,938	448,998	504,896	519,298	598,126	674,190	1.9	2.9
Average Household Size	4.52	4.40	4.07	4.00	3.65	3.31	-1.1	-2.1
Average Household Real Personal Disposable Income	$ 6,279	$ 7,354	$ 8,459	$ 9,012	$ 10,217	$ 9,683	3.3	.8
% of Owner-occupied Dwellings	76.4	75.1	72.5	72.9	74.3	74.3	- .4	.2
% of Single Detached Dwellings	77.1	75.4	72.4	71.6	68.3	71.6	- .7	0

[a] Census figures

[b] Intercensal estimates

Source: Statistics Canada, various Census publications
Author's calculations for intercensal years

TABLE II-2. RESIDENTIAL ENERGY PRICES AND DISTRIBUTION OF HOUSEHOLDS BY PRIMARY HEATING FUEL: SELECTED YEARS, 1961-81

	1961	1966	1971	1972	1976	1981
A. Nominal Energy Prices						
Heating Oil ¢ per litre	3.9	3.9	4.9	5.3	9.7	25.0
Electricity ¢ per KWH						
Lighting and Appliances	2.1	1.8	1.8	1.8	2.7	5.2
Space Heating	1.4	1.4	1.3	1.3	2.1	3.9
B. Index of Real Energy Prices Per Net GJ (1961 = 100)						
Heating Oil	100.0	90.5	90.5	95.2	123.8	200.0
Electricity						
Lighting and Appliances	100.0	75.9	63.3	62.0	64.6	77.2
Space Heating	100.0	86.6	69.2	65.4	75.0	88.5
C. Percentage Distribution of Households by Primary Heating Fuel						
Heating Oil	52.7	73.1	87.7	88.3	79.9	68.8
Electricity	.2	.5	3.1	3.9	15.0	19.3
Natural Gas	.5	.5	.2	.2	.1	.1
Solid Fuel	46.6	25.9	9.0	8.4	5.0	11.8

Source: Energy, Mines and Resources Canada, unpublished data; Statistics Canada, "Electric Power Statistics", Cat. No. 57-001; Statistics Canada, "Survey of Household Facilities and Equipment", Cat. No. 64-202.

TABLE II-3. RESIDENTIAL ENERGY CONSUMPTION: SELECTED YEARS, 1961-81

(NET ENERGY)

	GJ per Capita	GJ per Household	GJ per $ 1,000 of Real PDI	Percentage Distribution			
				Oil Products	Electricity	Natural Gas	Solid Fuel
1961	24.7	111.6	17.8	64.3	8.6	.1	27.0
1966	26.6	117.1	15.9	73.6	11.2	a	15.2
1971	36.1	147.1	17.4	81.3	13.3	a	5.4
1972	41.9	167.3	18.6	81.9	13.4	a	4.7
1976	37.7	137.5	13.5	72.1	24.6	a	3.3
1981	32.5	107.7	11.1	56.0	32.3	a	11.7

[a]less than .1 per cent.

B. THE INDUSTRIAL SECTOR

1. Structural Changes in Industrial Production

a. The 1961-72 Period

The Atlantic region experienced a period of rapid economic growth during the 1960s with real output in the industrial sector increasing at an average annual rate of 5.1 per cent. That period also produced a number of structural changes in the industrial composition of real output in Atlantic Canada. Manufacturing and utilities saw their shares of output increase from 37.4 per cent and 5.7 per cent, respectively, in 1961 to 39.0 per cent and 10.1 per cent in 1972. The contribution of construction remained virtually constant at about 27 per cent, but the share of primary industries dropped from 29.9 per cent to 24.1 per cent.

Overall during the 1961-72 period the major change in the industrial structure of Atlantic Canada was an increase in the contribution of manufacturing and utilities at the expense of the primary industries.

b. The 1973-81 Period

The average annual rate of growth of industrial output subsided in the 1970s, dropping to 3.3 per cent from 5.1 per cent in the previous period. A slowdown also occurred in the pace of change in the industrial structure. Utilities were the only sector that recorded significant gains, with their share of total output increasing from 10.1 per cent to 13.9 per cent. The contribution of manufacturing and primary industries experienced only a modest increase, rising from 39.0 per cent and 24.1 per cent, respectively, to 39.7 per cent and 25.7 per cent; construction, on the other hand, saw its share drop from 26.8 per cent to 20.7 per cent.

2. Trends in Energy Prices

a. The 1961-72 Period

The real prices of the three major sources of energy in the industrial sector - coal and coke, fuel oil, and electricity - followed a downward trend in the 1960s. Large declines were recorded by the prices of electricity, which fell by 19.2 per cent from 1961 to 1972, and fuel oil (-14.3 percent); the real price of coal and coke remained virtually constant in this period.

b. The 1973-81 Period

The downward trend of the 1960s was reversed in the following decade; from 1972 to 1980 the real price of a net GJ of energy more than tripled in the case of fuel oil, and rose by 71 per cent for electricity, and 57 per cent for coal and coke.

3. Trends in Energy Use

a. The 1961-72 Period

Net energy use in the industrial sector increased at a rapid rate in this period, averaging 6.0 per cent increase per year. The energy-output ration fluctuated along a positive trend and moved from 64.0 GJ per $1,000 of real output in 1961 to 70.6 GJ in 1972.

The increase in the energy-output ratio was accompanied by substantial shifts in the energy mix. The most notable change was the reduction in the contribution of coal, coke and coke oven gas (CCG), whose share plummeted to 6.8 per cent from 31.1 per cent. With natural gas available only in negligible amounts (for residential and commercial use) and the contribution of wood residue falling slightly (from 8.9 per cent to 8.0 per cent), the drop in the use of

CCG was offset primarily by high consumption of oil products, whose share rose from 42.7 per cent to 59.2 per cent, and to a lesser extent electricity (up from 17.4 per cent to 26.1 per cent).

b. The 1973-81 Period

The average annual growth of energy consumption followed the trend of real output in the industrial sector and dropped from 6.0 per cent to 3.1 per cent.

The energy-output ratio did not respond to the large increases in real energy prices. Energy use per $ 1,000 of real output fluctuated widely in the 1970s, but in 1981 at 69.7 GJ it was only slightly below its 1972 level (70.6 GJ).

The energy mix, on the other hand, experienced a reversal of the trend of the previous period. The share of oil products, which had increased substantially in the 1960s nearly reaching the 60 per cent mark in 1972, fell to 49.8 per cent in 1981. All other energy forms recorded gains; electricity saw its contribution rise from 26.1 per cent to 29.1 per cent; wood residue raised its share to 11.5 per cent from 8.0 per cent; and CCG moved from 6.8 per cent to 9.6 per cent.

It appears, therefore, that during the 1973-81 period rapidly escalating real energy prices had no negative influence on energy consumption per unit of output in the industrial sector, although shifts in relative prices did affect the energy mix. The most conspicuous change in the energy mix was the increase in the contribution of solid fuel and the decline in the share of oil products.

The response of the industrial sector to escalating energy prices and shifts in relative energy prices was a move to reduce energy costs by increasing the use of "in-house" energy supplies (mainly wood residue in the pulp and paper industry) and shifting away from the fuel with the fastest price increase (oil products). The main thrust of the "energy policy" of the industrial sector in the 1970s was aimed at reducing costs through interfuel substitution rather than curtailing energy consumption per unit of output by improving the efficiency of energy use and/or introducing fundamental changes in the structure of the industry.

TABLE II-4. PERCENTAGE DISTRIBUTION OF REAL OUTPUT BY INDUSTRY, 1961, 1972, 1981

INDUSTRY	PERCENTAGE OF REAL OUTPUT		
	1961	1972	1981
Agriculture	7.6	4.0	5.1
Forestry	4.2	3.7	3.4
Fishing and Trapping	6.6	4.0	4.2
Mining	11.5	12.4	13.0
Construction	27.0	26.8	20.7
Electric Power, Gas and Water Utilities	5.7	10.1	13.9
Manufacturing	37.4	39.0	39.7
TOTAL	100.0	100.0	100.0

TABLE II-5. ENERGY PRICES IN THE MANUFACTURING SECTOR: SELECTEC YEARS, 1961-81

	1961	1966	1971	1972	1976	1980
A. Nominal Energy Prices						
Coal & Coke, $ per short ton	11.4	9.3	14.5	15.5	37.9	54.1
Fuel Oil, ¢ per litre	1.7	1.7	1.9	2.1	6.2	13.3
Electricity, ¢ per Kwh	.7	.8	.8	.8	1.4	2.7
B. Index of Real Energy Prices per Net GJ (1961 = 100)						
Coal & Coke	100.0	71.4	85.7	100.0	157.1	157.1
Fuel Oil	100.0	85.7	85.7	85.7	171.4	271.4
Electricity	100.0	103.8	84.6	80.8	100.0	138.5

TABLE II-6. DISTRIBUTION OF NET ENERGY USE IN THE INDUSTRIAL SECTOR: SELECTED YEARS, 1961-81

	1961	1966	1971	1972	1976	1981
A. GJ per $ 1,000 of Real Output	64.0	56.5	67.7	70.6	73.4	69.7
B. Percentage Distribution						
Refined Petroleum Products	42.7	38.4	59.1	59.2	60.8	49.8
Electricity	17.4	24.9	24.6	26.1	26.3	29.1
Coal, Coke, Coke Oven Gas	31.1	26.6	8.2	6.8	5.7	9.6
Wood Residue	8.9	10.1	8.1	8.0	7.2	11.5

C. THE COMMERCIAL SECTOR

1. Trends in Energy Use

The commercial sector does not lend itself to the same format of analysis used for the residential and industrial sectors. First, it covers a vast variety of users, from the small corner store to the large office or shopping complex. Second, in some cases energy use and expenditures on energy are not closely related: this happens particularly with rented business premises where energy costs are incorporated in the rent or when energy expenditures are part of a large budget, as with most public institutions. Third, output in the commercial sector is largely in the form of services whose production often does not require a direct input of energy. Finally, energy prices are not recorded separately for the commercial sector, with the exception of electricity and natural gas (irrelevant in Atlantic Canada). For thoses reasons the discussion in this section will be confined to an overview of the pattern of energy consumption during the past twenty years.

a. The 1961-72 Period

Net energy use in the commercial sector increased at an average annual rate of 9.1 per cent, more than doubling within an eleven year span. This rapid growth in energy use was accompanied by large shifts in the energy mix among the three major energy sources (oil products, electricity and coal). The major structural change in energy use was the dramatic decline in the role of coal, whose relative contribution plunged from 22.5 per cent to 1.1 per cent. The main substitute for coal was "oil products" whose share rose from 65.4 per cent to 80.1 per cent; the role of electricity also expanded in this period and its share increased from 12.1 per cent to 18.8 per cent.

b. The 1973-81 Period

After rising rapidly during the previous decade, commercial energy consumption began to fall and by 1981 it was 17.3 per cent lower than in 1972. Changes in the energy mix were dominated by a major shift from oil products to electricity. The relative contribution of refined petroleum products fell from 80.1 per cent to 60.2 per cent and at the same time the share of electricity more than doubled, rising from 18.8 per cent to 38.3 per cent.

TABLE II-7.

TRENDS IN NET ENERGY USE IN THE COMMERICAL SECTOR: SELECTED YEARS, 1961-81

	1961	1966	1971	1972	1976	1981
Net Energy Use TJ	20,251	32,106	51,797	53,014	43,798	43,866
Percentage Distribution of Net Energy Use						
Refined Petroleum Products	65.4	75.9	80.0	80.1	67.5	60.2
Electricity	12.1	14.7	17.3	18.8	31.0	38.3
Natural Gas	*	*	*	*	*	*
Coal	22.5	9.4	2.7	1.1	1.4	1.4

* Less than .1%.

D. THE TRANSPORTATION SECTOR

1. Trends in Energy Prices

Historical data on energy prices in the transportation sector are available only for motor gasoline. However, since energy consumption in transportation is composed almost entirely of oil products, mogas prices can be considered a good proxy for average energy prices.

a. The 1961-72 Period

The nominal price of gasoline increased from 9.3¢ per litre in 1961 to 11.3¢ per litre in 1972. Most of this increase resulted from high taxes. The federal sales tax rose from 11 per cent 12 per cent and average provincial fuel taxes increased from 4.1¢ per litre to 4.8¢ per litre.

The real price of gasoline, however, followed a downward trend, falling from $ 17.9 per effective GJ in 1961 to $ 15.6 per effective GJ in 1972.

b. The 1973-81 Period

The nominal price of gasoline increased rapidly in this period, more than tripling from 11.3¢ per litre to 35.3¢ per litre. This large jump in gasoline prices was due to a combination of higher crude oil prices and higher taxes. Federal sales and excise taxes increased from .5¢ per litre in 1972 to about 3.3¢ per litre in 1981, and average provincial fuel taxes rose from 4.8¢ per litre to 5.8¢ per litre.

Real gasoline prices moved also upwards but not as rapidly an nominal prices. The real price of a net GJ of

gasoline increased by 37.8 per cent during the 1972-81 period, moving from $ 15.6 to $ 21.5.

2. Trends in Energy Consumption

With the exception of a negligible amount of coal used in the 1960s, energy consumption in the transportation sector involves refined petroleum products only. Within this category there is also a definite association between type of fuel and mode of transportation. Gasoline is used exclusively for road transport; heavy fuel oil is presently used only in marine transport; and diesel is a common fuel in road, rail, and marine transport.

a. The 1961-72 Period

Net energy consumption in the transportation sector increased at an average annual rate of 6.1 per cent in this period. Such rapid growth in total energy consumption was accompanied by small shifts in the energy mix. Among the major fuels, the relative contribution of gasoline and diesel increased by approximately 2.5 percentage points each, reaching the level of 52.8 per cent and 18.8 per cent, respectively in 1972; the share of heavy fuel oil dropped by nearly 5 percentage points to a level of 14.1 per cent, and the share of aviation fuel remained fairly constant around the 12 per cent mark.

b. The 1973-81 Period

The average annual rate of growth of net energy use decelerated greatly in the 1972-81 period, falling to 1.4 per cent.

The energy mix continued to change along the trend of the previous period. Gasoline and diesel continued to make gains with their shares reaching a level of 59.5 per cent and 21.3 per cent, respectively, in 1981; the contribution of heavy fuel oil recorded a steady decline, dropping to 5.5 per cent, while the share of aviation fuel edged slightly upwards to nearly 14 per cent.

TABLE II-8.

TRENDS IN ENERGY PRICES AND NET ENERGY CONSUMPTION IN THE TRANSPORTATION SECTOR: SELECTED YEARS, 1961-81

	1961	1966	1971	1972	1976	1981
Gasoline Prices						
Nominal Prices; ¢ per litre	9.3	9.8	11.2	11.3	17.7	35.3
Real Prices, $ per effective GJ	17.9	16.9	16.2	15.6	17.1	21.5
Net Energy Use TJ	15,618	19,949	26,052	29,952	30,636	33,839
Precentage Distribution of Net Energy Use						
Motor Gasoline	50.5	50.2	52.6	52.8	62.1	59.5
Diesel	16.0	18.7	20.1	18.8	19.8	21.3
Heavy Fuel Oil	18.9	18.1	10.9	14.1	3.8	5.5
Aviation Fuel	12.9	11.7	12.1	11.8	14.3	13.7
Kerosene and LFO	0.7	1.1	4.2	2.4	-	-
Coal	1.0	0.2	0.1	0.1	-	-

TABLE II-9.

FEDERAL AND PROVINCIAL TAXES ON GASOLINE IN ATLANTIC CANADA, 1961-81

¢ per Litre of Regular Leaded Gasoline

	Federal Taxes		Provincial Fuel Taxes			
	Sales Tax	Excise Tax	Nfld	PEI	N.S.	N.B.
1961	11 %		4.18	3.52	4.18	3.96
1962	"		"	"	"	"
1963	"		"	3.96	"	"
1964	"		"	"	"	"
1965	"		"	"	"	"
1966	12 %		4.40	"	"	"
1967	"		"	"	"	"
1968	"		5.50	4.62	"	4.18
1969	"		"	"	4.62	4.40
1970	"		"	"	"	"
1971	"		"	"	"	"
1972	"		"	"	"	"
1973	"		"	"	"	"
1974	"		"	"	"	"
1975	"	2.20	"	"	"	"
1976	"	"	5.94	"	"	"
1977	1.10	"	"	"	"	"
1978	"	"	"	"	"	"
1979	"	1.50	6.00	"	"	"
1980	9 %	"	"	5.26	"	"
1981	"	"	22 %	22 %	"	16 %

E. ALL SECTORS

1. Economic Trends

a. The 1961-72 Period

The 1960s witnessed a rapid and steady growth in real output in Atlantic Canada. From 1961 through 1972 real gross domestic product (GDP) increased at an average annual rate of 5.5 per cent. During the same period, per capita real GDP grew at an average rate of 4.6 per cent, rising from $ 1,774 to $ 2,926.

b. The 1973-81 Period

The pace of growth of Atlantic Canada's economy decelerated considerably in this period, with average annual gains in real GDP reduced to 2.5 per cent; per capita real GDP grew at an even slower rate, recording average annual increases of 1.6 per cent.

2. Trends in Energy Use

a. The 1961-72 Period

Net energy use outpaced real output and increased at an average annual rate of 6.4 per cent in this period. Energy consumption per capita and per $ 1,000 of real GDP also followed an upward trend, rising from 79.4 GJ and 44.8 GJ, respectively, in 1961 to 144.2 GJ and 49.2 GJ in 1972.

In this period there were also substantial changes in the energy mix. The relative contribution of solid fuel plunged from 29.5 per cent to 7.9 per cent; at the same time, the relative share of oil products and electricity rose from 58.3 per cent and 12.1 per cent respectively, to 73.6 per cent and 18.5 per cent. In 1972, therefore, the energy supply of Atlantic Canada was dominated by oil products, with electricity and solid fuel combined providing slightly more than a quarter of total net energy requirements.

The distribution of net energy use by sector, on the other hand, experienced only marginal changes. The commerical sector increased its share by 3.3 percentage points at the expense of the other three sectors which experienced most modest reductions in their relative contribution.

b. The 1973-81 Period

The 1970s witnessed a reversal of the trends of the previous decade. During a nine-year period net energy use increased slightly more (7.3 per cent) than it did on the average during one year in the previous period (6.4 per cent). Energy consumption per capita and per $ 1,000 of real output actually followed a declining trend, falling from 144.2 GJ and 49.2 GJ, respectively, to 143.5 GJ and 42.4 GJ.

In this period there was also a reversal of the previous trends in interfuel substitution. The contribution of solid fuel, which had dropped to 7.9 per cent in 1972, nearly doubled reaching the 14.1 per cent level in 1981; at the same time the share of oil products fell from 73.6 per cent in 1972 to 57.9 per cent in 1981. The contribution of electricity continued its upward trend and in 1981 it reached the 28 percentage mark.

The percentage distribution of net energy use by sector also experienced noticeable changes after a period of stability. The

share of transportation edged slightly upwards to a level of 10.6 per cent in 1981, but the industrial sector increased its share by nearly 10 percentage points reaching 53.1 per cent in 1981. On the other hand, both the residential and commercial sectors experienced a substantial decrease in their shares of net energy use.

3. The Energy-GNP Relationship

We noticed earlier that the energy-GDP ratio reversed its upward trend after the rapid increase in energy prices in the early 1970s.

In order to test the hypothesis that the escalation of real energy prices after 1972 affected significantly the relationship between real GDP and energy consumption, the following equation was fitted to annual data for the period 1961-81.

(1) $\text{Ln } E = A + b_1 \text{ Ln } Y + b_2 D + b_3 Z$

where

E = net energy use in terajoules,

Y = real GDP in thousands of 1971 dollars,

D = a dummy variable with values of 0 for 1961-72 and 1 for 1973-81,

Z = a dummy variable constructed as the product of Ln Y and D, and

Ln = natural logarithm

Equation (1) reduces to

(1a) $\text{Ln } E = A + b_1 \text{ Ln } Y$

for the period 1961-72, and

(1b) $\text{Ln } E = (A + b_2) + (b_1 + b_3) \text{ Ln } Y$

for the period 1973-81.

Since during the 1961-72 period real energy prices remained fairly stable, the value of b_1 provides an approximate estimate of the income elasticity of the demand for energy with respect to real GNP in that period. The same interpretation cannot be assigned to $(b_1 + b_3)$, because the estimated value of b_3 may be affected by changes in energy prices and other relevant variables whose influences are not separately captured in (1). However, a statistically insignificant coefficient b_3 (which corresponds to a stable energy/output relationship throughout the entire sample period), can be interpreted as an indication that in the short and medium term the aggregate demand for energy is completely price-inelastic.

The estimated coefficients are shown below (the numbers in brackets are estimated T-values).

$$\text{(1a)}\quad \underset{}{\text{Ln } E} = \underset{}{2.651} + \underset{(24.2)}{1.140}\ \text{Ln } Y + \underset{(4.5)}{6.462}\ D - \underset{(-4.5)}{.736}Z$$

$$R^2 = 99.0 \qquad \text{D-W} = 2.0$$

We notice that for total energy use the value of b_1 is significantly greater than unity, thus suggesting that during the 1961-72 period there was a more than proportional relationship between real output and energy use in the Atlantic Region.

We also notice that the value of b_3 has a negative sign and is statistically significant at the 99 per cent level. This indicates that the rapid escalation of real energy prices after 1972 did exert a negative influence on the consumption of

energy per dollar of real GDP. The overall effect of higher prices upon energy consumption in Atlantic Canada (including changes in the economic structure and in households lifestyles) was fairly large in magnitude. Had the 1961-72 energy GDP relationship continued unchanged throughout the 1970s, net energy consumption in 1981 would have been 382,002 TJ; actual energy use in the same year was 320,591 TJ. The difference between "potential" and actual energy use, i.e. the change in energy use due to factors other than output growth, was 61,431 TJ. In 1981, therefore, energy consumption in the Atlantic Region was 16.1 per cent lower than it would have been if the 1961-72 energy-GDP relationship had remained unchanged. In other words, higher real energy prices reduced energy use in 1981 by a maximum of 16.1 per cent.

TABLE II-10 REAL GDP AND NET ENERGY USE IN ATLANTIC CANADA: SELECTED YEARS, 1961-81

	1961	1966	1971	1972	1976	1981
Real GDP ($ Million)	3,366	4,408	5,698	6,078	7,093	7,562
Net Energy Use						
Total TJ	150,662	190,008	277,023	298,875	319,727	320,591
Per Capita GJ	79.4	96.2	134.7	144.2	146.5	143.5
Per $ 1,000 of Real GDP GJ	44.8	43.1	48.6	49.2	45.1	42.4
Percentage Distribution of Net Energy Use By Product						
Refined Petroleum Products	58.3	60.9	72.8	73.6	68.4	57.9
Electricity	12.1	16.8	17.9	18.5	24.0	28.0
Natural Gas	*	*	*	*	*	*
Solid Fuel**	29.5	22.3	9.3	7.9	7.6	14.1
Percentage Distribution of Net Energy Use By Sector						
Residential	31.1	27.7	26.8	29.1	25.7	22.7
Commercial	13.4	16.9	18.7	17.7	13.7	13.7
Industrial	45.1	44.9	45.1	43.2	51.0	53.1
Transportation	10.4	10.5	9.4	10.0	9.6	10.6

* Less than 0.1%

** Wood, Wood Residue, Coal, Coke and Coke Oven Gas

PART III

FROM PRIMARY ENERGY TO NET ENERGY

In Part II the pattern of energy consumption by sector was analysed in terms of net energy. It was pointed out in the Introduction, however, that "in the process of performing a certain amount of work a large portion of energy is destroyed through consumption by the energy producers, losses in the conversion from one form of energy into another, and through inefficiencies in the energy-using appliances and equipment."

The process of transformation of primary energy into work (net energy use) is represented graphically in Figure III-1, and the relationship between primary energy and net energy isshown in Table III-1.

As shown in Table III-1, in 1981 Atlantic Canada used a total of 616,207 TJ of energy in order to deliver 288,196 TJ of work (net energy use). The First Law efficiency of energy consumption in Atlantic Canada in 1981 therefore was 46.8 per cent. In other words, 53.2 per cent of the primary energy was "wasted" in the process of transforming raw energy into work. Of the 328,001 TJ of wasted energy, the largest portion (66.0 per cent) was in the form of end-use conversion losses (due to less than 100 per cent efficiency of appliances and equipment), followed by electricity conversion losses (22.4 per cent) and producer's use (11.6 per cent). Within each sector the largest proportional conversion loss (or the lowest First Law efficiency) occurred in the transportation sector (80.2 per cent). Substantially lower conversion losses were recorded in the residential

sector (30.0 per cent), industrial sector (21.5 per cent) and commercial sector (20.0 per cent). Electricity generation produced 73,563 TJ of conversion losses from a total energy input of 163,362 TJ for an average efficiency of 55.0 per cent (relative conversion loss of 45.0 per cent).

The sectoral distribution of the "wasted" energy shows that transportation accounted for the largest share (41.7 per cent), followed by electricity general (22.4 per cent), producer's use (11.6 per cent), industrial use (11.5 per cent), residential use (9.5 per cent), and finally commercial use (3.3 per cent).

Because of wide differences in conversion efficiencies, the sectoral distribution of total energy consumption differs markedly from that of net energy use. According to the standard energy balance (column 4), the industrial and transportation sectors were the largest users of energy with respective shares of 34.8 per cent and 33.8 per cent; the residential sector consumed 20.6 per cent of the total and the commercial sector 10.9 per cent. The elimination of conversion losses alters drastically the above distribution. The industrial sector remains the leading energy user but its share jumps to 47.8 per cent; transportation, on the other hand, drops to last place with an 11.7 per cent share, while the shares of the residential and commercial sectors increase moderately to 25.2 per cent and 15.2 per cent, respectively.

Table III-1 also helps to clarify the meaning of two of the most widely-used energy terms. Energy conservation, strictly

defined as a reduction in the energy requirements to perform a given task, refers to the consumption of net energy with a given stock and efficiency of appliances and equipment. Energy conservation, therefore, involves such activities as reduction in air infiltration, lowering air temperatures within a dwelling, increasing the amount of insulation, turning off lights, car pooling, reducing the weight and enhancing the aerodynamic shape of motor vehicles and the like. Measures aimed at reducing conversion losses are more aptly termed improvements in the efficiency of energy use. To the above category belong such activities as substituting incandescent with fluorescent lighting, improving the efficiency of gas, oil and wood furnaces and boilers, and shifting from thermal to hydro generation of electricity.

The difference between the two terms is quite significant for energy policy formulation, especially since conservation is often associated with the idea of changing lifestyles and perhaps a lower standard of living (for example less comfort from lower temperatures in a dwelling or reduced travelling). Table III-1 shows that conversion losses (including producer's use) are larger than net energy use. Therefore, there may be greater opportunities for reducing total energy consumption through efficiency improvements than through energy conservation.

Figure III-1. From Primary to Net Energy Use

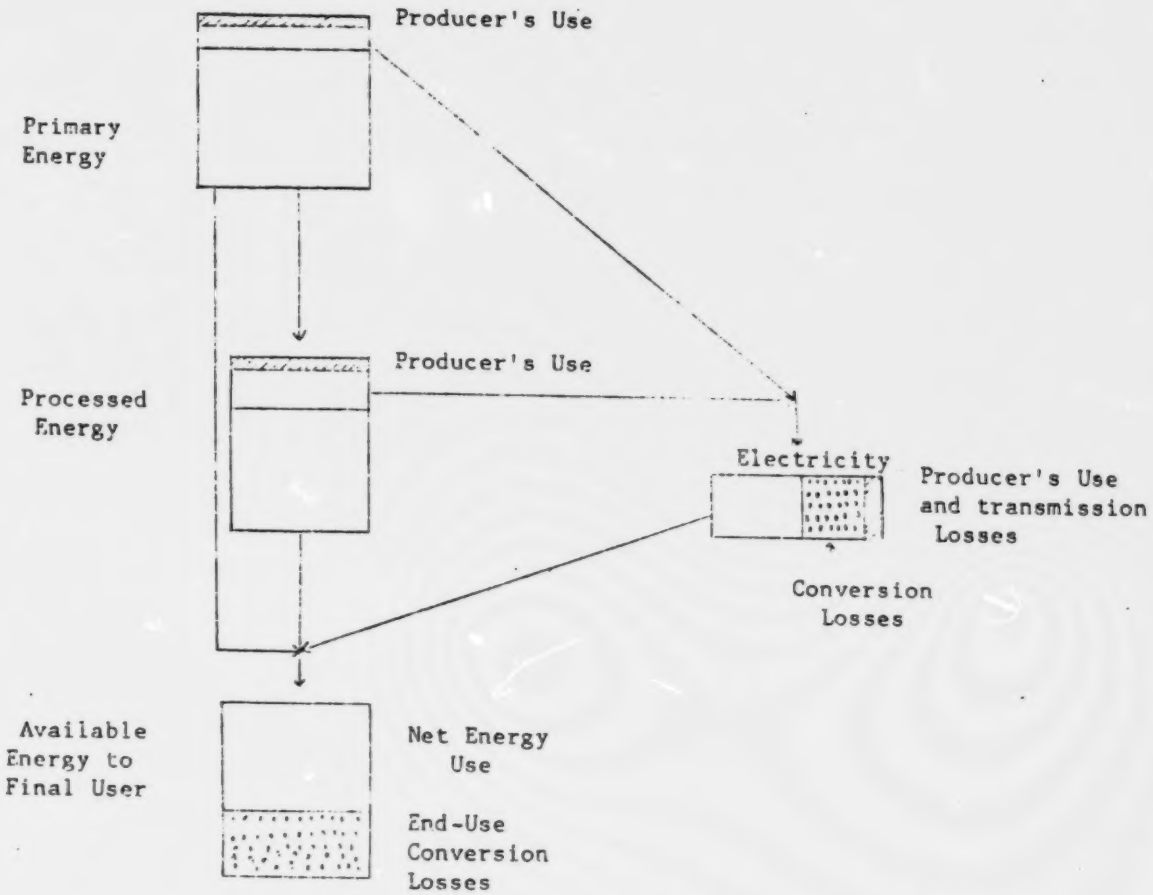
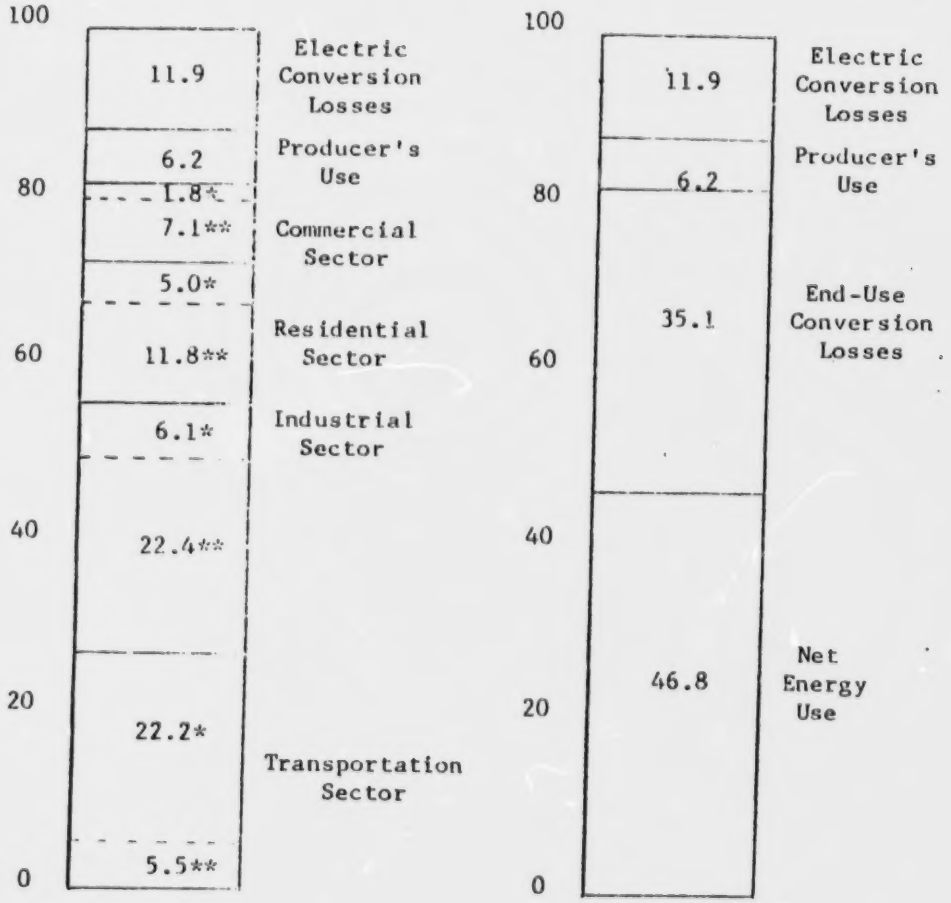
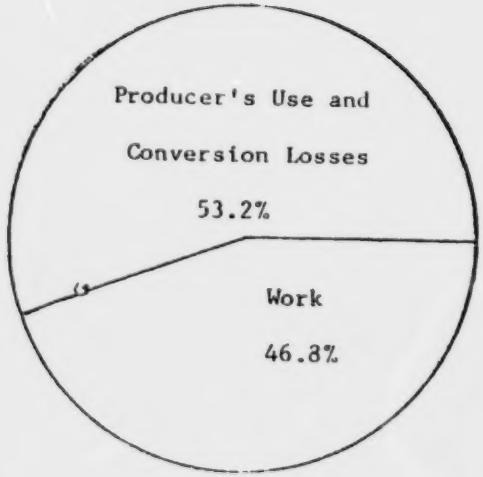


FIGURE III-2. RELATIONSHIP BETWEEN PRIMARY ENERGY AND NET ENERGY

ATLANTIC CANADA, 1981





* End-use Conversion Losses

** Net Energy Use

TABLE III-1

FROM PRIMARY ENERGY TO NET ENERGY

ATLANTIC CANADA, 1981

	TJ	% Distribution Within Each Major Grouping	% of Primary Energy Use	% of Total Energy Use	% of Net Energy Use
1. Primary Energy Use	616,207		100.0		
2. Electric Conversion Losses					
Hydro	10,110	13.7	1.6		
Thermal	63,453	86.3	10.3		
Total	73,563	100.0	11.9		
3. Producer's Use	37,984		6.2		
4. Availability (Total Energy Use)	504,660		81.9	100.0	
5. Energy Use by Sector					
Residential					
Net Energy Use	72,635	70.0	11.8	14.4	25.2
Conversion Losses	31,106	30.0	5.0	6.2	
Total Energy Use	103,741	100.0	16.8	20.6	
Commercial					
Net Energy Use	43,866	80.0	7.1	8.7	15.2
Conversion Losses	10,932	20.0	1.8	2.2	
Total Energy Use	54,798	100.0	8.9	10.9	
Industrial *					
Net Energy Use	137,856	78.5	22.4	27.3	47.8
Conversion Losses	37,682	21.5	6.1	7.5	
Total Energy Use	175,538	100.0	28.5	34.8	
Transportation					
Net Energy Use	33,839	19.8	5.5	6.7	11.7
Conversion Losses	136,744	80.2	22.2	27.1	
Total Energy Use	170,583	100.0	27.7	33.8	
All Sectors					
Net Energy Use*	288,196		46.8	37.1	100.0
Conversion Losses	216,464		35.1	42.9	
Total Energy Use	504,660		81.9	100.0	

* Excludes producer's use.

PART IV

DATA

A. ENERGY CONSUMPTION

NATURAL UNITS

TABLE A-1 MOTOR GASOLINE CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

000'S BARRELS

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	0	0	357	7167	0	0	0	7167	7524
1962	0	0	331	7719	0	0	0	7719	8050
1963	0	0	564	7799	0	0	0	7799	8363
1964	0	0	674	8291	0	0	0	8291	8965
1965	0	0	909	8726	0	0	0	8726	9635
1966	0	0	1256	9094	0	0	0	9094	10350
1967	0	0	1387	9431	0	0	0	9431	10818
1968	0	0	1512	10160	0	0	0	10160	11672
1969	0	0	1447	10912	0	0	0	10912	12359
1970	0	0	1189	12081	0	0	0	12081	13270
1971	0	0	1205	12450	0	0	0	12450	13655
1972	0	0	1320	14363	0	0	0	14363	15683
1973	0	0	1433	15356	0	0	0	15356	16789
1974	0	0	1589	16379	0	0	0	16379	17968
1975	0	0	1560	16904	0	0	0	16904	18464
1976	0	0	1383	17281	0	0	0	17281	18664
1977	0	0	1337	17663	0	0	0	17663	19000
1978	0	0	1254	18519	0	0	0	18519	19773
1979	0	0	1270	19291	0	0	0	19291	20561
1980	0	0	1258	19304	0	0	0	19304	20562
1981	0	0	1184	18281	0	0	0	18281	19465

TABLE A-2 DIESEL FUEL CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

000'S BARRELS

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	0	388	531	62	864	0	1296	2222	3141
1962	0	426	565	63	854	0	1451	2368	3359
1963	0	399	564	66	775	0	1667	2508	3471
1964	0	386	906	70	1086	0	1761	2917	4209
1965	0	584	831	85	1310	0	1876	3271	4686
1966	0	519	1152	69	1084	0	2267	3420	5091
1967	0	445	1266	93	1033	0	2544	3670	5381
1968	0	481	1404	121	1154	0	2995	4270	6155
1969	0	530	1306	345	1088	0	2722	4155	5991
1970	0	550	1451	565	1359	0	2540	4464	6465
1971	0	615	1516	625	1298	0	2740	4663	6794
1972	0	600	1409	600	1222	0	3322	5144	7153
1973	0	1001	1769	406	1290	0	2916	4612	7382
1974	0	1164	2119	471	1266	0	3209	4946	8229
1975	0	1062	2066	1040	1589	0	2985	4694	7824
1976	0	1427	1303	1964	1094	0	1691	4949	7679
1977	0	1702	1451	2184	1051	0	1818	5053	8206
1978	0	1143	1787	2632	835	0	1648	5115	8045
1979	0	881	1922	3148	1006	0	1968	6122	8925
1980	0	890	1839	3046	706	0	2491	6243	8972
1981	0	1017	2148	2993	750	0	2081	5824	6989

TABLE A-3 LIGHT FUEL OIL CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

000'S BARRELS

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	4840	704	485	0	7	0	5	12	6041
1962	5297	799	471	0	14	0	0	14	6581
1963	6043	894	116	0	11	0	25	36	7089
1964	6836	848	296	0	19	0	15	34	8014
1965	7065	1434	468	0	17	0	15	32	8999
1966	6632	1481	386	0	14	0	33	47	8546
1967	7610	1771	485	0	17	0	22	39	9905
1968	8492	2532	471	0	47	0	53	100	11595
1969	8877	1737	551	0	109	0	55	164	11329
1970	10626	1600	796	0	89	0	23	112	13134
1971	11320	1550	756	0	195	0	37	232	13858
1972	13707	2170	1059	0	110	0	137	247	17183
1973	13203	2108	1168	0	303	0	36	339	16818
1974	13939	1733	1663	0	296	0	108	404	17739
1975	12126	2086	1329	0	30	0	73	103	15644
1976	11938	2747	943	0	0	0	0	0	15628
1977	11364	2511	1250	0	0	0	0	0	15125
1978	10688	3375	987	0	0	0	0	0	15050
1979	9915	3144	883	0	0	0	0	0	13942
1980	10332	3182	894	0	0	0	0	0	14408
1981	8597	3053	762	0	0	0	0	0	12412

TABLE A-4 HEAVY FUEL OIL CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

000'S BARRELS

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	0	1536	3214	0	256	0	2450	2706	7456
1962	0	1670	3738	0	265	0	2526	2791	8199
1963	5	1781	3496	0	222	0	2862	3084	8366
1964	4	2555	3825	0	268	0	2570	2838	9222
1965	8	2466	4053	0	355	0	2574	2929	9456
1966	60	2669	3024	0	347	0	2759	3106	8859
1967	19	3468	3726	0	373	0	2989	3362	10575
1968	13	4009	3758	0	259	0	3385	3644	11424
1969	49	5158	5722	0	62	0	3253	3315	14244
1970	42	4850	6704	0	151	0	3532	3683	15279
1971	110	6100	8474	0	247	0	3357	3604	18288
1972	133	5700	8165	0	372	0	3980	4352	18350
1973	313	2474	11409	0	373	0	3908	4281	18477
1974	357	3875	8716	0	273	0	3354	3627	16575
1975	484	3015	9452	0	140	0	2443	2583	15514
1976	67	2393	11766	0	0	0	1753	1753	15979
1977	51	3199	13304	0	0	0	1298	1298	17852
1978	133	1822	12313	0	0	0	1416	1416	15684
1979	98	1649	10885	0	0	0	3413	3413	16045
1980	95	1963	10338	0	0	0	2520	2520	14916
1981	106	1338	9718	0	0	0	2784	2784	13946

TABLE A-5 KEROSENE CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

000'S BARRELS

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	3088	204	106	0	20	0	0	20	3418
1962	3034	225	120	0	56	0	0	56	3435
1963	3273	192	87	0	8	0	7	15	3567
1964	3455	184	102	0	16	0	2	18	3759
1965	3646	257	91	0	34	0	4	38	4032
1966	3351	410	130	0	37	0	1	38	3929
1967	3783	460	123	0	33	0	5	38	4404
1968	3932	589	146	0	27	0	5	32	4679
1969	3610	201	511	0	15	0	3	18	4340
1970	4199	60	361	0	15	0	3	18	4638
1971	3997	73	461	0	25	0	1	26	4562
1972	4243	88	499	0	24	0	3	27	4856
1973	3723	131	212	0	22	0	1	23	4089
1974	3658	146	305	0	19	0	2	21	4130
1975	3106	193	380	0	20	0	3	23	3702
1976	2787	208	375	0	0	0	0	0	3370
1977	2447	249	185	0	0	0	0	0	2881
1978	2146	398	103	0	0	0	0	0	2647
1979	1795	380	77	0	0	0	0	0	2252
1980	1715	312	57	0	0	0	0	0	2084
1981	1294	267	35	0	0	0	0	0	1596

TABLE A-6 PETROLEUM COKE CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

000'S BARRELS

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0
1968	0	0	198	0	0	0	0	0	198
1969	0	0	281	0	0	0	0	0	281
1970	0	0	269	0	0	0	0	0	269
1971	0	0	256	0	0	0	0	0	256
1972	0	0	274	0	0	0	0	0	274
1973	0	0	351	0	0	0	0	0	351
1974	0	0	340	0	0	0	0	0	340
1975	0	0	240	0	0	0	0	0	240
1976	0	0	279	0	0	0	0	0	279
1977	0	0	282	0	0	0	0	0	282
1978	0	0	298	0	0	0	0	0	298
1979	0	0	542	0	0	0	0	0	542
1980	0	0	497	0	0	0	0	0	497
1981	0	0	456	0	0	0	0	0	456

TABLE A-7 AVIATION GASOLINE CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

000'S BARRELS

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	0	0	0	0	0	704	0	704	704
1962	0	0	0	0	0	646	0	646	646
1963	0	0	0	0	0	532	0	532	532
1964	0	0	0	0	0	502	0	502	502
1965	0	0	0	0	0	449	0	449	449
1966	0	0	0	0	0	365	0	365	365
1967	0	0	0	0	0	391	0	391	391
1968	0	0	0	0	0	325	0	325	325
1969	0	0	0	0	0	304	0	304	304
1970	0	0	0	0	0	272	0	272	272
1971	0	0	0	0	0	295	0	295	295
1972	0	0	0	0	0	279	0	279	279
1973	0	0	0	0	0	264	0	264	264
1974	0	0	0	0	0	235	0	235	235
1975	0	0	0	0	0	226	0	226	226
1976	0	0	0	0	0	236	0	236	236
1977	0	0	0	0	0	223	0	223	223
1978	0	0	0	0	0	224	0	224	224
1979	0	0	0	0	0	200	0	200	200
1980	0	0	0	0	0	128	0	128	128
1981	0	0	0	0	0	87	0	87	87

TABLE A-8 AVIATION TURBO FUEL CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

000'S BARRELS

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	0	0	0	0	0	730	0	730	730
1962	0	0	0	0	0	756	0	756	756
1963	0	0	0	0	0	920	0	920	920
1964	0	0	0	0	0	974	0	974	974
1965	0	0	0	0	0	1096	0	1096	1096
1966	0	0	0	0	0	1137	0	1137	1137
1967	0	0	0	0	0	1238	0	1238	1238
1968	0	0	0	0	0	1430	0	1430	1430
1969	0	0	0	0	0	1478	0	1478	1478
1970	0	0	0	0	0	1534	0	1534	1534
1971	0	0	0	0	0	1658	0	1658	1658
1972	0	0	0	0	0	1887	0	1887	1887
1973	0	0	0	0	0	2151	0	2151	2151
1974	0	0	0	0	0	2186	0	2186	2186
1975	0	0	0	0	0	2121	0	2121	2121
1976	0	0	0	0	0	2407	0	2407	2407
1977	0	0	0	0	0	2522	0	2522	2522
1978	0	0	0	0	0	2830	0	2830	2830
1979	0	0	0	0	0	2595	0	2595	2595
1980	0	0	0	0	0	2585	0	2585	2585
1981	0	0	0	0	0	2657	0	2657	2657

TABLE A-9 LIQUID PETROLEUM GAS CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

000'S BARRELS

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	197	0	141	0	0	0	0	0	338
1962	247	0	54	0	0	0	0	0	301
1963	291	0	85	0	0	0	0	0	376
1964	436	0	127	0	0	0	0	0	563
1965	284	0	194	0	0	0	0	0	478
1966	244	0	316	0	0	0	0	0	560
1967	389	0	236	0	0	0	0	0	625
1968	317	0	325	0	0	0	0	0	642
1969	236	0	450	0	0	0	0	0	718
1970	246	0	560	0	0	0	0	0	806
1971	439	0	444	0	0	0	0	0	883
1972	519	0	392	0	0	0	0	0	911
1973	453	0	404	0	0	0	0	0	857
1974	532	0	391	0	0	0	0	0	923
1975	637	0	385	0	0	0	0	0	1022
1976	636	0	969	0	0	0	0	0	1605
1977	630	0	941	0	0	0	0	0	1571
1978	441	221	895	0	0	0	0	0	1557
1979	478	239	1148	0	0	0	0	0	1865
1980	506	253	1280	0	0	0	0	0	2039
1981	436	369	1038	0	0	0	0	0	1843

TABLE A-10 STILL GAS CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

000'S BARRELS

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	0	0	1006	0	0	0	0	0	1006
1962	0	0	1052	0	0	0	0	0	1052
1963	0	0	1385	0	0	0	0	0	1385
1964	0	0	1547	0	0	0	0	0	1547
1965	0	0	1488	0	0	0	0	0	1488
1966	0	0	1471	0	0	0	0	0	1471
1967	0	0	1446	0	0	0	0	0	1446
1968	0	0	1332	0	0	0	0	0	1332
1969	0	0	1577	0	0	0	0	0	1577
1970	0	0	1819	0	0	0	0	0	1819
1971	0	0	2096	0	0	0	0	0	2096
1972	0	0	2597	0	0	0	0	0	2597
1973	0	0	2829	0	0	0	0	0	2829
1974	0	0	3102	0	0	0	0	0	3102
1975	0	0	2959	0	0	0	0	0	2959
1976	0	0	2800	0	0	0	0	0	2800
1977	0	0	3078	0	0	0	0	0	3078
1978	0	0	3035	0	0	0	0	0	3035
1979	0	0	3175	0	0	0	0	0	3175
1980	0	0	3272	0	0	0	0	0	3272
1981	0	0	2373	0	0	0	0	0	2373

TABLE A-11 CRUDE OIL CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

000'S BARRELS

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	0	0	10	0	0	0	0	0	10
1962	0	0	12	0	0	0	0	0	12
1963	0	0	10	0	0	0	0	0	10
1964	0	0	10	0	0	0	0	0	10
1965	0	0	10	0	0	0	0	0	10
1966	0	0	10	0	0	0	0	0	10
1967	0	0	10	0	0	0	0	0	10
1968	0	0	10	0	0	0	0	0	10
1969	0	0	12	0	0	0	0	0	12
1970	0	0	7	0	0	0	0	0	7
1971	0	0	8	0	0	0	0	0	8
1972	0	0	9	0	0	0	0	0	9
1973	0	0	10	0	0	0	0	0	10
1974	0	0	8	0	0	0	0	0	8
1975	0	0	7	0	0	0	0	0	7
1976	0	0	5	0	0	0	0	0	5
1977	0	0	5	0	0	0	0	0	5
1978	0	0	5	0	0	0	0	0	5
1979	0	0	5	0	0	0	0	0	5
1980	0	0	5	0	0	0	0	0	5
1981	0	0	2	0	0	0	0	0	2

TABLE A-12 REFINED PETROLEUM PRODUCTS CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

000'S BARRELS

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	8125	2832	5850	7229	1147	1434	3751	13561	30368
1962	8578	3120	6343	7782	1169	1402	3977	14350	32391
1963	9612	3266	6307	7865	1016	1452	4561	14894	34079
1964	10731	3973	7487	8361	1389	1476	4348	15574	37765
1965	11003	4741	8044	8811	1716	1545	4469	16541	40329
1966	10307	5079	7745	9163	1482	1503	5060	17208	40339
1967	11801	6144	8679	9524	1456	1629	5560	18169	44793
1968	12754	7591	9146	10281	1487	1755	6438	19961	49452
1969	12774	7626	11887	11257	1274	1782	6033	20346	52633
1970	15113	7060	13156	12646	1614	1806	6098	22164	57493
1971	15866	8343	15216	13075	1765	1953	6135	22928	62353
1972	18602	8559	15723	14963	1728	2166	7442	26299	69182
1973	17692	5714	19585	15762	1968	2415	6861	27026	70017
1974	18486	6918	18233	16850	1854	2421	6673	27798	71435
1975	16333	6356	18380	17944	1779	2347	4584	26654	67723
1976	15428	6775	19323	19245	1094	2643	3644	26626	69852
1977	14492	7661	21833	19847	1051	2745	3116	26759	70745
1978	13408	6959	20677	21151	835	3054	3064	28104	69148
1979	12286	6293	19907	22439	1006	2795	5381	31621	70107
1980	12648	6600	19440	22350	706	2713	5011	30780	69468
1981	10433	6044	17716	21274	750	2744	4865	29633	63826

TABLE A-13 ELECTRICITY CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

GWH

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	1108	680	3284	0	0	0	0	0	5072
1962	1223	742	3634	0	0	0	0	0	5599
1963	1296	844	4207	0	0	0	0	0	6347
1964	1401	1004	4802	0	0	0	0	0	7207
1965	1501	1067	5659	0	0	0	0	0	8227
1966	1630	1307	5914	0	0	0	0	0	8851
1967	1838	1394	6386	0	0	0	0	0	9618
1968	2052	1557	7221	0	0	0	0	0	10830
1969	2236	1903	7484	0	0	0	0	0	11623
1970	2450	2155	8343	0	0	0	0	0	12948
1971	2752	2487	8546	0	0	0	0	0	13785
1972	3238	2769	9344	0	0	0	0	0	15351
1973	3619	2895	10517	0	0	0	0	0	17031
1974	4256	3143	11598	0	0	0	0	0	18997
1975	4945	3677	10414	0	0	0	0	0	19036
1976	5616	3766	11921	0	0	0	0	0	21303
1977	5877	3877	12537	0	0	0	0	0	22291
1978	6097	3968	13101	0	0	0	0	0	23166
1979	6202	4161	13102	0	0	0	0	0	23465
1980	6398	4494	13446	0	0	0	0	0	24338
1981	6519	4686	13759	0	0	0	0	0	24944

TABLE A-14 NATURAL GAS CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

MMCF

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	78	10	0	0	0	0	0	0	88
1962	74	14	0	0	0	0	0	0	88
1963	61	20	0	0	0	0	0	0	81
1964	63	2	0	0	0	0	0	0	65
1965	59	6	0	0	0	0	0	0	65
1966	48	17	0	0	0	0	0	0	65
1967	41	24	0	0	0	0	0	0	65
1968	40	26	0	0	0	0	0	0	66
1969	34	27	0	0	0	0	0	0	61
1970	33	31	0	0	0	0	0	0	64
1971	32	40	0	0	0	0	0	0	72
1972	29	31	0	0	0	0	0	0	60
1973	19	29	0	0	0	0	0	0	48
1974	17	49	0	0	0	0	0	0	66
1975	19	63	0	0	0	0	0	0	82
1976	17	77	0	0	0	0	0	0	94
1977	16	66	0	0	0	0	0	0	82
1978	14	67	0	0	0	0	0	0	81
1979	16	73	0	0	0	0	0	0	89
1980	17	60	0	0	0	0	0	0	77
1981	12	55	0	0	0	0	0	0	67

TABLE A-15 COAL CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

000'S SHORT TONS

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	445	263	516	0	55	0	19	74	1298
1962	413	251	398	0	36	0	22	58	1120
1963	383	235	432	0	25	0	17	42	1092
1964	375	220	422	0	24	0	15	39	1056
1965	345	202	390	0	20	0	1	21	958
1966	293	175	475	0	19	0	0	19	962
1967	289	166	418	0	17	0	0	17	890
1968	242	145	309	0	15	0	0	15	711
1969	184	124	171	0	11	0	0	11	490
1970	159	107	112	0	12	0	0	12	390
1971	105	85	16	0	11	0	0	11	217
1972	126	33	23	0	11	0	0	11	193
1973	90	30	23	0	12	0	0	12	155
1974	74	31	11	0	0	0	0	0	116
1975	61	30	34	0	0	0	0	0	125
1976	50	35	54	0	0	0	0	0	139
1977	54	33	221	0	0	0	0	0	308
1978	48	32	208	0	0	0	0	0	288
1979	49	38	397	0	0	0	0	0	484
1980	53	34	434	0	0	0	0	0	521
1981	53	35	307	0	0	0	0	0	395

TABLE A-16 COKE CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

000'S SHORT TONS

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	15	0	318	0	0	0	0	0	333
1962	12	0	355	0	0	0	0	0	367
1963	12	0	413	0	0	0	0	0	425
1964	12	0	394	0	0	0	0	0	406
1965	10	0	347	0	0	0	0	0	357
1966	7	0	404	0	0	0	0	0	411
1967	7	0	321	0	0	0	0	0	328
1968	5	0	454	0	0	0	0	0	459
1969	3	0	529	0	0	0	0	0	532
1970	2	0	547	0	0	0	0	0	549
1971	1	0	323	0	0	0	0	0	324
1972	0	0	273	0	0	0	0	0	273
1973	0	0	476	0	0	0	0	0	476
1974	7	0	488	0	0	0	0	0	495
1975	0	0	391	0	0	0	0	0	391
1976	0	0	269	0	0	0	0	0	269
1977	0	0	350	0	0	0	0	0	350
1978	0	0	442	0	0	0	0	0	442
1979	0	0	571	0	0	0	0	0	571
1980	0	0	467	0	0	0	0	0	467
1981	0	0	266	0	0	0	0	0	266

TABLE A-17: COKE OVEN GAS CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

MMCF

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	0	0	4288	0	0	0	0	0	4288
1962	0	0	4379	0	0	0	0	0	4379
1963	0	0	5204	0	0	0	0	0	5204
1964	0	0	4843	0	0	0	0	0	4843
1965	0	0	4660	0	0	0	0	0	4660
1966	0	0	5575	0	0	0	0	0	5575
1967	0	0	4684	0	0	0	0	0	4684
1968	0	0	7313	0	0	0	0	0	7313
1969	0	0	9265	0	0	0	0	0	9265
1970	0	0	9056	0	0	0	0	0	9056
1971	0	0	5613	0	0	0	0	0	5613
1972	0	0	4386	0	0	0	0	0	4386
1973	0	0	6796	0	0	0	0	0	6796
1974	0	0	8121	0	0	0	0	0	8121
1975	0	0	5856	0	0	0	0	0	5856
1976	0	0	4235	0	0	0	0	0	4235
1977	0	0	3961	0	0	0	0	0	3961
1978	0	0	5736	0	0	0	0	0	5736
1979	0	0	8289	0	0	0	0	0	8289
1980	0	0	8528	0	0	0	0	0	8528
1981	0	0	7124	0	0	0	0	0	7124

TABLE A-18: WOOD AND WOOD RESIDUE CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
	000'S CORDS	000'S CORDS	000'S BONE DRY TONS	ROAD	RAIL	AIR	MARINE	SUM	
1961	744	0	833	0	0	0	0	0	0
1962	689	0	869	0	0	0	0	0	0
1963	619	0	913	0	0	0	0	0	0
1964	564	0	1011	0	0	0	0	0	0
1965	504	0	1085	0	0	0	0	0	0
1966	454	0	1193	0	0	0	0	0	0
1967	424	0	1190	0	0	0	0	0	0
1968	374	0	1280	0	0	0	0	0	0
1969	329	0	1429	0	0	0	0	0	0
1970	304	0	1426	0	0	0	0	0	0
1971	300	0	1407	0	0	0	0	0	0
1972	274	0	1428	0	0	0	0	0	0
1973	248	0	1674	0	0	0	0	0	0
1974	238	0	1785	0	0	0	0	0	0
1975	234	0	1375	0	0	0	0	0	0
1976	234	0	1619	0	0	0	0	0	0
1977	303	0	1598	0	0	0	0	0	0
1978	394	0	1527	0	0	0	0	0	0
1979	609	0	1722	0	0	0	0	0	0
1980	762	0	2474	0	0	0	0	0	0
1981	887	1	2397	0	0	0	0	0	0

TABLE A-19 REFINED PETROLEUM PRODUCTS CONSUMPTION BY PRODUCT IN THE ATLANTIC REGION, 1961-1981

YEAR	000'S BARRELS											
	MOTOR GASOLINE	DIESEL FUEL	KEROSENE	LIGHT FUEL OIL	HEAVY FUEL OIL	LIQUID PETROLEUM GAS	PETROLEUM COKE	STILL GAS	AVIATION GASOLINE	AVIATION TURBO FUEL	CRUDE OIL	TOTA
1961	7524	3141	3418	6041	7456	338	0	1006	704	730	10	3036
1962	8050	3359	3435	6581	8199	301	0	1052	646	756	12	3239
1963	8363	3471	3567	7089	8366	376	0	1385	532	920	10	3407
1964	8965	4209	3759	8014	9222	563	0	1547	502	974	10	3776
1965	9635	4686	4032	8999	9456	478	0	1488	449	1096	10	4022
1966	10350	5091	3929	8546	8859	580	0	1471	366	1137	10	4033
1967	10818	5381	4404	9905	10575	625	0	1446	391	1238	10	4479
1968	11672	6155	4679	11595	11424	642	188	1332	325	1430	10	4935
1969	12359	5991	4340	11329	14244	718	281	1577	304	1478	12	5263
1970	13270	6465	4638	13134	15279	806	269	1819	272	1534	7	5749
1971	13655	6794	4562	13858	18288	693	256	2096	295	1658	8	6225
1972	15683	7153	4856	17183	18350	911	274	2597	279	1887	9	6918
1973	16789	7362	4089	16818	18477	857	351	2829	264	2151	10	7001
1974	17968	8229	4130	17739	16575	923	340	3102	235	2186	8	7143
1975	18464	7824	3702	15644	15514	1022	240	2959	226	2121	7	6772
1976	18664	7679	3370	15629	15979	1605	279	2800	236	2407	5	6385
1977	19000	8206	2881	15125	17852	1571	282	3078	223	2522	5	7074
1978	19773	8045	2647	15050	15684	1557	298	3035	224	2830	5	6914
1979	20561	8925	2252	13942	16045	1865	542	3175	200	2595	5	7010
1980	20562	8972	2084	14408	14916	2039	497	3272	128	2585	5	6945
1981	19465	8989	1596	12412	13946	1843	456	2373	87	2657	2	6382

TABLE A-20 ENERGY CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

YEAR	NATURAL UNITS							
	REFINED PETROLEUM PRODUCTS	ELECTRICITY	NATURAL GAS	COAL	COKE	COKE OVEN GAS	WOOD	WOOD RESIDUE
	000'S BARRELS	GWH	MMCF	000'S SHORT TONS	000'S SHORT TONS	MMCF	000'S CORDS	000'S BONE DRY TONS
1961	30368	5072	88	1298	333	4298	744	833
1962	32391	5599	88	1120	367	4379	689	869
1963	34079	6347	81	1092	425	5204	619	913
1964	37765	7207	65	1056	406	4843	564	1011
1965	40329	8227	65	958	357	4660	504	1085
1966	40339	8851	65	962	411	5575	454	1193
1967	44793	9618	65	890	328	4684	424	1190
1968	49452	10830	66	711	459	7313	374	1260
1969	52633	11623	61	490	532	9265	329	1429
1970	57493	12948	64	390	549	9056	304	1426
1971	62353	13785	72	217	324	5613	300	1407
1972	69182	15351	60	193	273	4366	274	1428
1973	70017	17031	48	155	476	6796	248	1674
1974	71435	18997	66	116	495	8121	238	1765
1975	67723	19036	82	125	391	5856	234	1375
1976	68652	21303	94	139	269	4235	234	1619
1977	70745	22291	92	308	350	3961	303	1586
1978	69148	23166	80	288	442	5736	394	1527
1979	70107	23465	89	484	571	8289	609	1722
1980	69468	24338	76	521	467	8528	762	2474
1981	63826	24944	66	395	266	7124	888	2397

TABLE A-21 REFINED PETROLEUM PRODUCTS CONSUMPTION IN THE RESIDENTIAL SECTOR OF THE ATLANTIC REGION, 1961-1981

000'S BARRELS

YEAR	MOTOR GASOLINE	DIESEL FUEL	KEROSENE	LIGHT FUEL OIL	HEAVY FUEL OIL	LIQUID PETROLEUM GAS	PETROLEUM COKE	STILL GAS	AVIATION GASOLINE	AVIATION TURBO FUEL	CRUDE OIL	TOTAL
1961	0	0	3088	4840	0	197	0	0	0	0	0	812
1962	0	0	3034	5297	0	247	0	0	0	0	0	857
1963	0	0	3273	6043	5	291	0	0	0	0	0	961
1964	0	0	3455	6836	4	436	0	0	0	0	0	1075
1965	0	0	3546	7065	8	284	0	0	0	0	0	1100
1966	0	0	3351	6632	60	264	0	0	0	0	0	1030
1967	0	0	3783	7610	19	389	0	0	0	0	0	1180
1968	0	0	3932	8492	13	317	0	0	0	0	0	1275
1969	0	0	3610	8877	49	238	0	0	0	0	0	1277
1970	0	0	4199	10626	42	246	0	0	0	0	0	1511
1971	0	0	3997	11320	110	439	0	0	0	0	0	1586
1972	0	0	4243	13707	133	519	0	0	0	0	0	1880
1973	0	0	3723	13203	313	453	0	0	0	0	0	1787
1974	0	0	3658	13939	357	532	0	0	0	0	0	1848
1975	0	0	3106	12126	464	637	0	0	0	0	0	1633
1976	0	0	2787	11938	67	636	0	0	0	0	0	1542
1977	0	0	2447	11364	51	630	0	0	0	0	0	1449
1978	0	0	2146	10688	133	441	0	0	0	0	0	1340
1979	0	0	1795	9915	98	478	0	0	0	0	0	1228
1980	0	0	1715	10332	95	506	0	0	0	0	0	1284
1981	0	0	1294	8597	106	436	0	0	0	0	0	1043

TABLE A-22 REFINED PETROLEUM PRODUCTS CONSUMPTION IN THE COMMERCIAL SECTOR OF THE ATLANTIC REGION, 1961-1981

000'S BARRELS

YEAR	MOTOR GASOLINE	DIESEL FUEL	KEROSENE	LIGHT FUEL OIL	HEAVY FUEL OIL	LIQUID PETROLEUM GAS	PETROLEUM COKE	STILL GAS	AVIATION GASOLINE	AVIATION TURBO FUEL	CRUDE OIL	TOTAL
1961	0	388	204	704	1536	0	0	0	0	0	0	2832
1962	0	426	225	799	1670	0	0	0	0	0	0	3121
1963	0	399	192	894	1781	0	0	0	0	0	0	3266
1964	0	366	184	848	2555	0	0	0	0	0	0	3953
1965	0	564	257	1434	2466	0	0	0	0	0	0	4721
1966	0	519	410	1481	2669	0	0	0	0	0	0	5079
1967	0	445	460	1771	3468	0	0	0	0	0	0	6144
1968	0	481	569	2532	4009	0	0	0	0	0	0	7591
1969	0	530	201	1737	5158	0	0	0	0	0	0	7626
1970	0	550	60	1600	4850	0	0	0	0	0	0	7060
1971	0	615	78	1550	6100	0	0	0	0	0	0	8343
1972	0	600	88	2170	5700	0	0	0	0	0	0	8558
1973	0	1001	131	2108	2474	0	0	0	0	0	0	5714
1974	0	1164	146	1733	3875	0	0	0	0	0	0	6918
1975	0	1062	193	2086	3015	0	0	0	0	0	0	6356
1976	0	1427	208	2747	2393	0	0	0	0	0	0	6775
1977	0	1702	249	2511	3199	0	0	0	0	0	0	7661
1978	0	1143	398	3375	1822	221	0	0	0	0	0	6959
1979	0	881	380	3144	1649	239	0	0	0	0	0	6293
1980	0	890	312	3182	1963	253	0	0	0	0	0	6600
1981	0	1017	267	3053	1338	369	0	0	0	0	0	6044

TABLE A-23 REFINED PETROLEUM PRODUCTS CONSUMPTION IN THE INDUSTRIAL SECTOR OF THE ATLANTIC REGION, 1961-1981

000'S BARRELS

YEAR	MOTOR GASOLINE	DIESEL FUEL	KEROSENE	LIGHT FUEL OIL	HEAVY FUEL OIL	LIQUID PETROLEUM GAS	PETROLEUM COKE	STILL GAS	AVIATION GASOLINE	AVIATION TURBO FUEL	CRUDE OIL	TOTAL
1961	357	531	106	485	3214	141	0	1006	0	0	10	5850
1962	331	565	120	471	3738	54	0	1052	0	0	12	6343
1963	564	564	87	116	3496	85	0	1385	0	0	10	6307
1964	674	906	102	296	3825	127	0	1547	0	0	10	7487
1965	909	831	91	468	4053	194	0	1488	0	0	10	8044
1966	1256	1152	130	386	3024	316	0	1471	0	0	10	7745
1967	1387	1266	123	485	3726	236	0	1446	0	0	10	8679
1968	1512	1404	146	471	3758	325	188	1332	0	0	10	9146
1969	1447	1306	511	551	5722	480	281	1577	0	0	12	11887
1970	1189	1451	361	796	6704	560	269	1819	0	0	7	13156
1971	1205	1516	461	756	8474	444	256	2096	0	0	8	15218
1972	1320	1409	498	1059	8165	392	274	2597	0	0	9	15723
1973	1433	1769	212	1168	11409	404	351	2829	0	0	10	19585
1974	1589	2119	305	1663	8716	391	340	3102	0	0	8	18233
1975	1560	2068	380	1329	9452	385	240	2959	0	0	7	18380
1976	1383	1303	375	943	11766	969	279	2800	0	0	5	19823
1977	1337	1451	185	1250	13304	941	282	3078	0	0	5	21833
1978	1254	1787	103	987	12313	895	298	3035	0	0	5	20677
1979	1270	1922	77	883	10885	1148	542	3175	0	0	5	19907
1980	1258	1839	57	894	10338	1280	497	3272	0	0	5	19440
1981	1184	2148	35	762	9718	1038	456	2373	0	0	2	17715

TABLE A-24 REFINED PETROLEUM PRODUCTS CONSUMPTION IN THE TRANSPORTATION SECTOR OF THE ATLANTIC REGION, 1961-1981

000'S BARRELS

YEAR	MOTOR GASOLINE	DIESEL FUEL	KEROSENE	LIGHT FUEL OIL	HEAVY FUEL OIL	LIQUID PETROLEUM GAS	PETROLEUM COKE	STILL GAS	AVIATION GASOLINE	AVIATION TURBO FUEL	CRUDE OIL	TOTAL
1961	7167	2222	20	12	2706	0	0	0	704	730	0	13561
1962	7719	2368	56	14	2791	0	0	0	646	756	0	14350
1963	7799	2508	15	36	3084	0	0	0	532	920	0	14894
1964	8291	2917	18	34	2838	0	0	0	502	974	0	15574
1965	8726	3271	38	32	2929	0	0	0	449	1096	0	16541
1966	9094	3420	38	47	3106	0	0	0	366	1137	0	17208
1967	9431	3670	38	39	3362	0	0	0	391	1238	0	18169
1968	10160	4270	32	100	3644	0	0	0	325	1430	0	19961
1969	10912	4155	18	164	3315	0	0	0	304	1478	0	20346
1970	12081	4464	18	112	3683	0	0	0	272	1534	0	22164
1971	12450	4663	26	232	3604	0	0	0	295	1658	0	22928
1972	14363	5144	27	247	4352	0	0	0	279	1687	0	26099
1973	15356	4612	23	339	4281	0	0	0	264	2151	0	27026
1974	16379	4946	21	404	3627	0	0	0	235	2186	0	27798
1975	16904	4694	23	103	2583	0	0	0	226	2121	0	26654
1976	17281	4949	0	0	1753	0	0	0	236	2407	0	26626
1977	17663	5053	0	0	1298	0	0	0	223	2522	0	26759
1978	18519	5115	0	0	1416	0	0	0	224	2830	0	28104
1979	19291	6122	0	0	3413	0	0	0	200	2595	0	31621
1980	19304	6243	0	0	2520	0	0	0	128	2585	0	30780
1981	18281	5824	0	0	2784	0	0	0	87	2657	0	29633

TABLE A-25 ENERGY CONSUMPTION IN THE RESIDENTIAL SECTOR OF THE ATLANTIC REGION, 1961-1981

YEAR	REFINED PETROLEUM PRODUCTS 000'S BARRELS	ELECTRICITY GWH	NATURAL GAS MMCF	COAL & COKE 000'S SHORT TONS	WOOD 000'S CORDS	COKE OVEN GAS MMCF
1961	8125	1108	78	460	744	0
1962	8578	1223	74	425	689	0
1963	9612	1296	61	395	619	0
1964	10731	1401	63	387	564	0
1965	11003	1501	59	355	504	0
1966	10307	1630	48	300	454	0
1967	11601	1838	41	296	424	0
1968	12754	2052	40	247	374	0
1969	12774	2236	34	187	329	0
1970	15113	2450	33	161	304	0
1971	15866	2752	32	106	300	0
1972	18602	3238	29	126	274	0
1973	17692	3619	19	90	248	0
1974	18496	4256	17	81	238	0
1975	16333	4945	19	61	234	0
1976	15428	5616	17	50	234	0
1977	14492	5877	16	54	303	0
1978	13408	6097	14	48	394	0
1979	12286	6202	16	49	609	0
1980	12648	6398	17	53	762	0
1981	10433	6519	12	53	887	0

TABLE A-26 ENERGY CONSUMPTION IN THE COMMERCIAL SECTOR OF THE ATLANTIC REGION, 1961-1981

YEAR	REFINED PETROLEUM PRODUCTS 000'S BARRELS	ELECTRICITY GWH	NATURAL GAS MMCF	COAL & COKE 000'S SHORT TONS	WOOD 000'S CORDS	COKE OVEN GAS MMCF
1961	2832	680	10	263	0	0
1962	3120	742	14	251	0	0
1963	3266	844	20	235	0	0
1964	3973	1004	2	220	0	0
1965	4741	1087	6	202	0	0
1966	5079	1307	17	175	0	0
1967	6144	1394	24	166	0	0
1968	7591	1557	26	145	0	0
1969	7426	1903	27	124	0	0
1970	7060	2155	31	107	0	0
1971	8343	2487	40	85	0	0
1972	9558	2769	31	33	0	0
1973	5714	2895	29	30	0	0
1974	6918	3143	49	31	0	0
1975	6356	3677	63	30	0	0
1976	6775	3766	77	35	0	0
1977	7661	3877	66	33	0	0
1978	6959	3968	67	32	0	0
1979	6293	4161	73	38	0	0
1980	6600	4494	60	34	0	0
1981	6044	4666	55	35	1	0

TABLE A-27 ENERGY CONSUMPTION IN THE INDUSTRIAL SECTOR OF THE ATLANTIC REGION, 1961-1981

YEAR	REFINED PETROLEUM PRODUCTS 000'S BARRELS	ELECTRICITY GWH	NATURAL GAS MMCF	COAL & COKE 000'S SHORT TONS	WOOD RESIDUE 000'S BONE DRY TONS	COKE OVEN GAS MMCF
1961	5850	3284	0	834	833	4288
1962	6343	3634	0	753	869	4379
1963	6307	4207	0	645	913	5704
1964	7487	4802	0	816	1011	4843
1965	8044	5659	0	737	1085	4660
1966	7745	5914	0	879	1137	5575
1967	8679	6386	0	739	1190	4684
1968	9146	7221	0	763	1280	7313
1969	11897	7484	0	700	1429	9265
1970	13156	8343	0	659	1426	9056
1971	15216	8546	0	339	1407	5613
1972	15723	9344	0	296	1423	4396
1973	19585	10517	0	499	1674	6796
1974	18233	11598	0	499	1785	8121
1975	18380	10414	0	425	1375	5856
1976	19823	11921	0	323	1619	4235
1977	21833	12537	0	571	1588	3961
1978	20677	13101	0	550	1527	5735
1979	19907	13102	0	968	1722	8289
1980	19440	13446	0	901	2474	8523
1981	17716	13759	0	572	2397	7124

TABLE A-28 ENERGY CONSUMPTION IN THE TRANSPORTATION SECTOR OF THE ATLANTIC REGION, 1961-1981

YEAR	REFINED PETROLEUM PRODUCTS 000'S BARRELS	ELECTRICITY GWH	NATURAL GAS MMCF	COAL & COKE 000'S SHORT TONS	WOOD 000'S CORDS	COKE OVEN GAS MMCF
1961	13561	0	0	74	0	0
1962	14350	0	0	58	0	0
1963	14894	0	0	42	0	0
1964	15574	0	0	39	0	0
1965	16541	0	0	21	0	0
1966	17208	0	0	19	0	0
1967	18169	0	0	17	0	0
1968	19961	0	0	15	0	0
1969	20346	0	0	11	0	0
1970	22164	0	0	12	0	0
1971	22928	0	0	11	0	0
1972	24299	0	0	11	0	0
1973	27026	0	0	12	0	0
1974	27798	0	0	0	0	0
1975	26854	0	0	0	0	0
1976	26826	0	0	0	0	0
1977	26759	0	0	0	0	0
1978	28104	0	0	0	0	0
1979	31621	0	0	0	0	0
1980	30780	0	0	0	0	0
1981	29633	0	0	0	0	0

B. GROSS ENERGY CONSUMPTION

TERAJOULES

TABLE B-1 MOTOR GASOLINE CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

TERAJOULES

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	0	0	1966	39471	0	0	0	39471	41437
1962	0	0	1823	42511	0	0	0	42511	44334
1963	0	0	3106	42952	0	0	0	42952	46058
1964	0	0	3712	45661	0	0	0	45661	49373
1965	0	0	5006	48057	0	0	0	48057	53063
1966	0	0	6917	50084	0	0	0	50084	57001
1967	0	0	7639	51939	0	0	0	51939	59578
1968	0	0	8327	55954	0	0	0	55954	64281
1969	0	0	7969	60056	0	0	0	60056	68025
1970	0	0	6558	66524	0	0	0	66524	73082
1971	0	0	6636	68566	0	0	0	68566	75202
1972	0	0	7270	79101	0	0	0	79101	86371
1973	0	0	7892	84578	0	0	0	84578	92470
1974	0	0	8751	90204	0	0	0	90204	98955
1975	0	0	8591	93096	0	0	0	93096	101687
1976	0	0	7617	95171	0	0	0	95171	102788
1977	0	0	7363	97276	0	0	0	97276	104639
1978	0	0	6912	101985	0	0	0	101985	108897
1979	0	0	6998	106253	0	0	0	106253	113247
1980	0	0	6931	106320	0	0	0	106320	113251
1981	0	0	6523	100688	0	0	0	100688	107211

TABLE B-2 DIESEL FUEL CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

TERAJOULES

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	0	2384	3263	391	5309	0	7964	13654	19301
1962	0	2618	3472	387	5248	0	8915	14550	20640
1963	0	2452	3466	406	4752	0	10243	15411	21329
1964	0	2372	5567	430	6673	0	10821	17924	25863
1965	0	3589	5106	522	8050	0	11527	20099	28794
1966	0	7079	7079	424	6661	0	13930	21015	31283
1967	0	2734	7779	571	6348	0	15833	22752	33065
1968	0	2957	8627	744	7091	0	18402	26237	37821
1969	0	3257	8025	2120	6696	0	16725	25531	36813
1970	0	3380	8916	3472	8351	0	15807	27430	39725
1971	0	3779	9316	3839	7971	0	16830	28640	41735
1972	0	8658	8658	3687	7509	0	20413	31609	43954
1973	0	8151	10970	2495	7927	0	17918	28340	45361
1974	0	7152	13021	2894	7779	0	19720	30393	50566
1975	0	6526	12707	6391	9764	0	12699	28944	48077
1976	0	9787	9907	12068	6722	0	11620	30410	47186
1977	0	10458	8916	13420	6458	0	11172	31050	50424
1978	0	7026	10990	16167	5128	0	10124	31419	49435
1979	0	5415	11820	19047	6183	0	12095	37325	54560
1980	0	5471	11310	18720	4338	0	15307	38365	55146
1981	0	6251	13203	18399	4610	0	12791	35800	55254

TABLE B-3 LIGHT FUEL OIL CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

TERAJOULES

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	29746	4327	2980	0	43	0	31	74	37127
1962	32554	4910	2895	0	86	0	0	86	40445
1963	37139	5494	713	0	68	0	153	221	43567
1964	42013	5212	1818	0	117	0	92	209	49252
1965	43420	8813	2876	0	104	0	93	197	55306
1966	40759	9102	2372	0	86	0	203	289	52522
1967	46769	10884	2981	0	104	0	136	240	60874
1968	52190	15561	2894	0	289	0	326	615	71260
1969	54556	10675	3387	0	670	0	338	1008	69626
1970	65305	9833	4893	0	547	0	141	688	80719
1971	69570	9526	4646	0	1198	0	228	1426	85168
1972	84240	13336	6509	0	676	0	842	1518	105603
1973	81143	12955	7179	0	1862	0	221	2083	103360
1974	85666	10651	10220	0	1819	0	664	2483	109020
1975	74524	12820	8168	0	184	0	449	633	96145
1976	73368	16882	5796	0	0	0	0	0	96046
1977	69841	15432	7682	0	0	0	0	0	92955
1978	65686	20744	6064	0	0	0	0	0	92494
1979	60946	19326	5430	0	0	0	0	0	85702
1980	63505	19560	5498	0	0	0	0	0	88563
1981	52840	18768	4682	0	0	0	0	0	76290

TABLE B-4 HEAVY FUEL OIL CONSUMPTION ATLANTIC REGION, 1961-1981

TERAJOULES

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	0	10185	21311	0	1697	0	16245	17942	49438
1962	0	11073	24786	0	1757	0	16749	18506	54365
1963	33	11809	23181	0	1472	0	18977	20449	55472
1964	27	16941	26362	0	1777	0	17041	18818	61148
1965	53	16351	26874	0	2354	0	17067	19421	62699
1966	398	17697	20051	0	2301	0	18294	20595	58741
1967	126	22995	24706	0	2473	0	19819	22292	70119
1968	86	26582	24918	0	1717	0	22445	24162	75748
1969	325	34201	37940	0	411	0	21570	21981	94447
1970	278	32159	44452	0	1001	0	23420	24421	101310
1971	729	40447	56188	0	1638	0	22259	23897	121261
1972	882	37795	54139	0	2467	0	26389	28856	121672
1973	2075	16404	75649	0	2473	0	25913	28386	122514
1974	2367	25694	57793	0	1810	0	22239	24049	109903
1975	3076	19991	62674	0	928	0	16199	17127	102968
1976	444	15867	78016	0	0	0	11624	11624	105951
1977	338	21211	88215	0	0	0	8606	8606	118370
1978	880	12081	81635	0	0	0	9399	9399	103995
1979	650	10936	72169	0	0	0	22658	22658	106412
1980	631	13017	66541	0	0	0	16723	16723	98912
1981	902	8872	64446	0	0	0	18457	18457	92677

TABLE B-5 KEROSENE CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

TERAJOULES

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	18485	1221	634	0	120	0	0	120	20460
1962	18162	1347	718	0	335	0	0	335	20562
1963	19592	1149	521	0	48	0	42	90	21352
1964	20681	1101	611	0	96	0	12	108	22501
1965	21835	1538	545	0	204	0	24	228	24146
1966	20059	2454	778	0	222	0	6	228	23519
1967	22644	2754	736	0	198	0	30	228	26362
1968	23536	3406	874	0	162	0	30	192	28008
1969	21609	1203	3059	0	90	0	18	108	25979
1970	25135	359	2161	0	90	0	18	108	27763
1971	23925	467	2760	0	150	0	6	156	27308
1972	25398	527	2981	0	144	0	18	162	29068
1973	22286	784	1269	0	132	0	6	138	24477
1974	21896	874	1826	0	114	0	12	126	24722
1975	18592	1155	2275	0	120	0	18	138	22160
1976	16683	1245	2245	0	0	0	0	0	20173
1977	14648	1491	1107	0	0	0	0	0	17246
1978	12847	2381	617	0	0	0	0	0	15845
1979	10746	2279	461	0	0	0	0	0	13486
1980	10273	1870	341	0	0	0	0	0	12484
1981	7747	1607	206	0	0	0	0	0	9560

TABLE B-6 PETROLEUM COKE CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

TERAJOULES

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0
1968	0	0	1266	0	0	0	0	0	1266
1969	0	0	1892	0	0	0	0	0	1892
1970	0	0	1812	0	0	0	0	0	1812
1971	0	0	1724	0	0	0	0	0	1724
1972	0	0	1845	0	0	0	0	0	1845
1973	0	0	2364	0	0	0	0	0	2364
1974	0	0	2290	0	0	0	0	0	2290
1975	0	0	1616	0	0	0	0	0	1616
1976	0	0	1879	0	0	0	0	0	1879
1977	0	0	1899	0	0	0	0	0	1899
1978	0	0	2007	0	0	0	0	0	2007
1979	0	0	3650	0	0	0	0	0	3650
1980	0	0	3347	0	0	0	0	0	3347
1981	0	0	3073	0	0	0	0	0	3073

TABLE B-7 AVIATION GASOLINE CONSUMPTION IN THE ATLANTIC REGION, 1961-1991

TERAJOULES

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	0	0	0	0	0	3752	0	3752	3752
1962	0	0	0	0	0	3443	0	3443	3443
1963	0	0	0	0	0	2836	0	2836	2836
1964	0	0	0	0	0	2676	0	2676	2676
1965	0	0	0	0	0	2393	0	2393	2393
1966	0	0	0	0	0	1951	0	1951	1951
1967	0	0	0	0	0	2084	0	2084	2084
1968	0	0	0	0	0	1732	0	1732	1732
1969	0	0	0	0	0	1620	0	1620	1620
1970	0	0	0	0	0	1450	0	1450	1450
1971	0	0	0	0	0	1572	0	1572	1572
1972	0	0	0	0	0	1487	0	1487	1487
1973	0	0	0	0	0	1407	0	1407	1407
1974	0	0	0	0	0	1253	0	1253	1253
1975	0	0	0	0	0	1205	0	1205	1205
1976	0	0	0	0	0	1258	0	1258	1258
1977	0	0	0	0	0	1189	0	1189	1189
1978	0	0	0	0	0	1194	0	1194	1194
1979	0	0	0	0	0	1066	0	1066	1066
1980	0	0	0	0	0	682	0	682	682
1981	0	0	0	0	0	465	0	465	465

TABLE B-8 AVIATION TURBO FUEL CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

TERAJOULES

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	0	0	0	0	0	4169	0	4169	4169
1962	0	0	0	0	0	4317	0	4317	4317
1963	0	0	0	0	0	5254	0	5254	5254
1964	0	0	0	0	0	5562	0	5562	5562
1965	0	0	0	0	0	6259	0	6259	6259
1966	0	0	0	0	0	6492	0	6492	6492
1967	0	0	0	0	0	7070	0	7070	7070
1968	0	0	0	0	0	8166	0	8166	8166
1969	0	0	0	0	0	8440	0	8440	8440
1970	0	0	0	0	0	8759	0	8759	8759
1971	0	0	0	0	0	9468	0	9468	9468
1972	0	0	0	0	0	10776	0	10776	10776
1973	0	0	0	0	0	12284	0	12284	12284
1974	0	0	0	0	0	12483	0	12483	12483
1975	0	0	0	0	0	12112	0	12112	12112
1976	0	0	0	0	0	13745	0	13745	13745
1977	0	0	0	0	0	14402	0	14402	14402
1978	0	0	0	0	0	16161	0	16161	16161
1979	0	0	0	0	0	14818	0	14818	14818
1980	0	0	0	0	0	14762	0	14762	14762
1981	0	0	0	0	0	15173	0	15173	15173

TABLE B-9 LIQUID PETROLEUM GAS CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

TERAJOULES

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	851	0	622	0	0	0	0	0	1473
1962	1067	0	240	0	0	0	0	0	1307
1963	1257	0	373	0	0	0	0	0	1630
1964	1883	0	556	0	0	0	0	0	2439
1965	1226	0	858	0	0	0	0	0	2084
1966	1140	0	1400	0	0	0	0	0	2540
1967	1680	0	1049	0	0	0	0	0	2729
1968	1369	0	1440	0	0	0	0	0	2809
1969	1028	0	2134	0	0	0	0	0	3162
1970	1062	0	2485	0	0	0	0	0	3547
1971	1896	0	1970	0	0	0	0	0	3866
1972	2241	0	1738	0	0	0	0	0	3979
1973	1956	0	1792	0	0	0	0	0	3748
1974	2297	0	1740	0	0	0	0	0	4037
1975	2751	0	1703	0	0	0	0	0	4454
1976	2747	0	4304	0	0	0	0	0	7051
1977	2721	0	4184	0	0	0	0	0	6905
1978	1905	843	3979	0	0	0	0	0	6727
1979	1940	971	3962	0	0	0	0	0	6873
1980	2054	1027	5691	0	0	0	0	0	8772
1981	1770	1497	4619	0	0	0	0	0	7886

TABLE B-10 STILL GAS CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

TERAJOULES

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	0	0	6670	0	0	0	0	0	6670
1962	0	0	6975	0	0	0	0	0	6975
1963	0	0	9183	0	0	0	0	0	9183
1964	0	0	10257	0	0	0	0	0	10257
1965	0	0	9866	0	0	0	0	0	9866
1966	0	0	9754	0	0	0	0	0	9754
1967	0	0	9589	0	0	0	0	0	9589
1968	0	0	9832	0	0	0	0	0	9832
1969	0	0	10456	0	0	0	0	0	10456
1970	0	0	12061	0	0	0	0	0	12061
1971	0	0	13904	0	0	0	0	0	13904
1972	0	0	17220	0	0	0	0	0	17220
1973	0	0	18758	0	0	0	0	0	18758
1974	0	0	20568	0	0	0	0	0	20568
1975	0	0	19620	0	0	0	0	0	19620
1976	0	0	13566	0	0	0	0	0	13566
1977	0	0	20409	0	0	0	0	0	20409
1978	0	0	20124	0	0	0	0	0	20124
1979	0	0	21057	0	0	0	0	0	21057
1980	0	0	21699	0	0	0	0	0	21699
1981	0	0	15738	0	0	0	0	0	15738

TABLE B-11 CRUDE OIL CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

TERAJOULES

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	0	0	61	0	0	0	0	0	61
1962	0	0	73	0	0	0	0	0	73
1963	0	0	61	0	0	0	0	0	61
1964	0	0	61	0	0	0	0	0	61
1965	0	0	61	0	0	0	0	0	61
1966	0	0	61	0	0	0	0	0	61
1967	0	0	61	0	0	0	0	0	61
1968	0	0	61	0	0	0	0	0	61
1969	0	0	73	0	0	0	0	0	61
1970	0	0	43	0	0	0	0	0	73
1971	0	0	49	0	0	0	0	0	43
1972	0	0	55	0	0	0	0	0	49
1973	0	0	61	0	0	0	0	0	55
1974	0	0	49	0	0	0	0	0	61
1975	0	0	43	0	0	0	0	0	49
1976	0	0	31	0	0	0	0	0	43
1977	0	0	31	0	0	0	0	0	31
1978	0	0	31	0	0	0	0	0	31
1979	0	0	31	0	0	0	0	0	31
1980	0	0	31	0	0	0	0	0	31
1981	0	0	12	0	0	0	0	0	12

TABLE B-12 REFINED PETROLEUM PRODUCTS CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

TERAJOULES

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	49082	18117	37507	39852	7169	7921	24240	79182	183888
1962	51783	19948	40982	42899	7426	7760	25664	83748	196461
1963	58021	20904	40604	43358	6392	8090	29373	87213	206742
1964	64604	25826	47944	46091	8675	9238	27954	90953	229132
1965	66534	30291	51192	46579	10736	8652	28687	96654	244671
1966	62356	32442	48412	50508	9276	9443	32427	100654	243864
1967	71219	39367	54539	52510	9153	9154	35588	106405	271530
1968	77181	48506	57239	56698	9289	9898	41173	117058	299982
1969	77518	49336	74935	62176	7875	10060	38633	118744	320533
1970	91790	45731	83381	69996	10007	10209	39163	129380	350272
1971	96120	54219	97193	72405	10963	11040	39017	133725	381257
1972	112761	55345	100415	82789	10914	12263	47644	153509	422030
1973	107460	36293	125834	87065	12400	12491	44052	157208	426796
1974	112226	44371	116259	93092	11534	13736	42623	160991	433846
1975	98943	40492	117397	99487	11014	13317	29327	153145	409977
1976	93242	42763	126461	107239	6722	15003	23244	152208	414874
1977	87548	48562	139806	110696	6458	15591	19778	152523	428469
1978	91318	43075	132359	118152	5123	17355	16523	157153	432910
1979	74282	38927	125575	125600	6183	15884	24753	182420	421204
1980	76463	40945	123389	125040	4338	15444	32030	176852	417649
1981	63259	36995	112502	119087	4610	15639	31248	170583	383339

TABLE B-13 ELECTRICITY CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

TERAJOULES

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	3989	2448	11922	0	0	0	0	0	18259
1962	4403	2671	13082	0	0	0	0	0	20156
1963	4666	3038	15145	0	0	0	0	0	22849
1964	5044	3614	17287	0	0	0	0	0	25945
1965	5404	3841	20372	0	0	0	0	0	29617
1966	5868	4705	21290	0	0	0	0	0	31862
1967	6617	5018	22990	0	0	0	0	0	34625
1968	7387	5605	25996	0	0	0	0	0	38988
1969	8050	6851	26942	0	0	0	0	0	41843
1970	8820	7758	30035	0	0	0	0	0	46613
1971	9907	8953	30786	0	0	0	0	0	49626
1972	11657	9968	33638	0	0	0	0	0	55262
1973	13028	10422	37861	0	0	0	0	0	61311
1974	15322	11315	41753	0	0	0	0	0	68390
1975	17802	13237	37490	0	0	0	0	0	68529
1976	20218	13558	42916	0	0	0	0	0	76692
1977	21157	13957	45133	0	0	0	0	0	80247
1978	21949	14285	47164	0	0	0	0	0	83398
1979	22327	14980	47167	0	0	0	0	0	84474
1980	23033	16178	48406	0	0	0	0	0	87617
1981	23468	16798	49533	0	0	0	0	0	89799

TABLE B-14 NATURAL GAS CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

TERAJOULES

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	80	10	0	0	0	0	0	0	90
1962	76	14	0	0	0	0	0	0	90
1963	62	21	0	0	0	0	0	0	83
1964	64	2	0	0	0	0	0	0	66
1965	60	6	0	0	0	0	0	0	66
1966	49	17	0	0	0	0	0	0	66
1967	42	24	0	0	0	0	0	0	66
1968	41	26	0	0	0	0	0	0	67
1969	35	27	0	0	0	0	0	0	62
1970	34	31	0	0	0	0	0	0	65
1971	33	40	0	0	0	0	0	0	73
1972	30	31	0	0	0	0	0	0	61
1973	19	30	0	0	0	0	0	0	49
1974	17	50	0	0	0	0	0	0	67
1975	19	65	0	0	0	0	0	0	84
1976	17	79	0	0	0	0	0	0	96
1977	16	68	0	0	0	0	0	0	84
1978	14	68	0	0	0	0	0	0	82
1979	16	75	0	0	0	0	0	0	91
1980	17	61	0	0	0	0	0	0	78
1981	12	56	0	0	0	0	0	0	68

TABLE B-15 COAL CONSUMPTION IN THE ATLANTIC REGION, 1961-1991

TERAJOULES

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	11840	6998	13729	1463	0	0	506	1969	34536
1962	10981	6674	10582	957	0	0	585	1542	29779
1963	10188	6251	11493	452	0	0	665	1117	29049
1964	9974	5852	11225	399	0	0	638	1037	28088
1965	9167	5368	10363	25	0	0	533	558	25456
1966	7783	4449	12619	0	0	0	505	505	25356
1967	7623	4413	11113	0	0	0	452	452	23601
1968	6434	3955	8216	0	0	0	399	399	19004
1969	4892	3297	4548	0	0	0	292	292	13029
1970	4233	2849	2982	0	0	0	320	320	10384
1971	2645	2141	388	0	0	0	292	292	5466
1972	3359	877	612	0	0	0	292	292	5139
1973	2366	791	612	0	0	0	320	320	4089
1974	1960	821	292	0	0	0	0	0	3073
1975	1624	789	916	0	0	0	0	0	3329
1976	1325	927	1431	0	0	0	0	0	3683
1977	1431	677	5874	0	0	0	0	0	8162
1978	1276	850	5528	0	0	0	0	0	7654
1979	1302	1010	10550	0	0	0	0	0	12862
1980	1409	904	11538	0	0	0	0	0	13851
1981	1409	931	8172	0	0	0	0	0	10512

TABLE B-16 COKE CONSUMPTION IN THE ATLANTIC REGION, 1961-1991

TERAJOULES

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	393	0	8324	0	0	0	0	0	8717
1962	314	0	9293	0	0	0	0	0	9607
1963	314	0	10811	0	0	0	0	0	11125
1964	314	0	10313	0	0	0	0	0	10627
1965	262	0	9083	0	0	0	0	0	9345
1966	193	0	10575	0	0	0	0	0	10768
1967	193	0	8403	0	0	0	0	0	8596
1968	131	0	11884	0	0	0	0	0	12015
1969	78	0	13848	0	0	0	0	0	13926
1970	52	0	14319	0	0	0	0	0	14371
1971	26	0	9455	0	0	0	0	0	9481
1972	0	0	7142	0	0	0	0	0	7142
1973	0	0	12460	0	0	0	0	0	12460
1974	193	0	12774	0	0	0	0	0	12967
1975	0	0	10235	0	0	0	0	0	10235
1976	0	0	7041	0	0	0	0	0	7041
1977	0	0	9162	0	0	0	0	0	9162
1978	0	0	11570	0	0	0	0	0	11570
1979	0	0	14548	0	0	0	0	0	14548
1980	0	0	12212	0	0	0	0	0	12212
1981	0	0	6960	0	0	0	0	0	6960

TABLE B-17 COKE OVEN GAS CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

TERAJOULES

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	0	0	2262	0	0	0	0	0	2262
1962	0	0	2310	0	0	0	0	0	2310
1963	0	0	2745	0	0	0	0	0	2745
1964	0	0	2555	0	0	0	0	0	2555
1965	0	0	2458	0	0	0	0	0	2458
1966	0	0	2941	0	0	0	0	0	2941
1967	0	0	2471	0	0	0	0	0	2471
1968	0	0	3858	0	0	0	0	0	3858
1969	0	0	4887	0	0	0	0	0	4887
1970	0	0	4777	0	0	0	0	0	4777
1971	0	0	2961	0	0	0	0	0	2961
1972	0	0	2314	0	0	0	0	0	2314
1973	0	0	3535	0	0	0	0	0	3535
1974	0	0	4284	0	0	0	0	0	4284
1975	0	0	3089	0	0	0	0	0	3089
1976	0	0	2234	0	0	0	0	0	2234
1977	0	0	2089	0	0	0	0	0	2089
1978	0	0	3026	0	0	0	0	0	3026
1979	0	0	4370	0	0	0	0	0	4370
1980	0	0	4497	0	0	0	0	0	4497
1981	0	0	3755	0	0	0	0	0	3755

TABLE B-18 WOOD AND WOOD RESIDUE CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

TERAJOULES

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION					TOTAL
				ROAD	RAIL	AIR	MARINE	SUM	
1961	13080	0	10034	0	0	0	0	0	23114
1962	12113	0	10462	0	0	0	0	0	22575
1963	10882	0	10992	0	0	0	0	0	21874
1964	9915	0	12183	0	0	0	0	0	22098
1965	8860	0	13065	0	0	0	0	0	21925
1966	7981	0	14765	0	0	0	0	0	22746
1967	7454	0	14329	0	0	0	0	0	21782
1968	6575	0	15412	0	0	0	0	0	21987
1969	5784	0	17209	0	0	0	0	0	22993
1970	5344	0	17179	0	0	0	0	0	22523
1971	5274	0	16944	0	0	0	0	0	22218
1972	4917	0	17200	0	0	0	0	0	22117
1973	4360	0	20167	0	0	0	0	0	24527
1974	4164	0	21497	0	0	0	0	0	25661
1975	4114	0	16535	0	0	0	0	0	20649
1976	4114	0	19504	0	0	0	0	0	23618
1977	5327	0	20400	0	0	0	0	0	25727
1978	6927	0	19700	0	0	0	0	0	26627
1979	10706	0	22000	0	0	0	0	0	32706
1980	13396	0	31500	0	0	0	0	0	44896
1981	15593	18	32600	0	0	0	0	0	48211

TABLE B-19 REFINED PETROLEUM PRODUCTS CONSUMPTION BY PRODUCT IN THE ATLANTIC REGION, 1961-1981

TERAJOULES

YEAR	MOTOR GASOLINE	DIESEL FUEL	KEROSENE	LIGHT FUEL OIL	HEAVY FUEL OIL	LIQUID PETROLEUM GAS	PETROLEUM COKE	STILL GAS	AVIATION GASOLINE	AVIATION TURBO FUEL	CRUDE OIL	TOTAL
1961	41437	19301	20460	37127	49438	1473	0	6670	3752	4169	61	183888
1962	44334	20640	20562	40445	54365	1307	0	6975	3443	4317	73	196461
1963	46058	21329	21352	43567	55472	1630	0	9183	2836	5254	61	206742
1964	49373	25863	22501	49252	61148	2439	0	10257	2678	5562	61	229132
1965	53063	28794	24146	55306	62699	2084	0	9866	2393	6259	61	244671
1966	57001	31283	23519	52522	58741	2540	0	9754	1951	6492	61	243864
1967	59578	33065	26362	60874	70119	2729	0	9568	2084	7070	61	271530
1968	64281	37821	29008	71260	75748	2809	1266	8832	1732	8166	61	299984
1969	68025	36813	25979	69626	94447	3162	1892	10456	1620	8440	73	320533
1970	73082	39726	27753	80719	101310	3547	1912	12061	1450	9759	43	350362
1971	75202	41735	27308	85168	121261	3866	1724	13904	1572	9468	49	381257
1972	86371	43954	29068	105603	121672	3979	1945	17220	1487	10776	55	422030
1973	92462	45361	24477	103360	122514	3748	2364	19758	1407	12284	61	426796
1974	98955	50566	24722	109020	109903	4037	2290	20568	1253	12483	49	433846
1975	101687	48077	22160	96145	102868	4454	1616	19620	1205	12112	43	409987
1976	102788	47196	20173	96045	105951	7051	1979	18566	1258	13745	31	414784
1977	104639	50424	17246	92955	118370	6905	1899	20409	1189	14402	31	428469
1978	108897	49435	15845	92494	103995	6727	2007	20124	1194	16161	31	416910
1979	113249	54860	13486	85702	106412	6673	3650	21057	1056	14618	31	421204
1980	113251	55146	12484	88563	98912	8772	3347	21699	682	14762	31	417649
1981	107211	55254	9560	75290	92677	7886	3073	15738	465	15173	12	383339

TABLE B-20 ENERGY CONSUMPTION IN THE ATLANTIC REGION, 1961-1981

TERAJOULES

YEAR	REFINED PETROLEUM PRODUCTS	ELECTRICITY	NATURAL GAS	COAL	COKE	COKE OVEN GAS	WOOD AND WOOD RESIDUE	TOTAL
1961	183888	18259	90	34536	8717	2262	23114	270866
1962	196461	20156	90	29779	9607	2310	22575	280678
1963	206742	22849	93	29049	11125	2745	21874	294477
1964	229132	25945	66	26088	10627	2556	22098	316512
1965	244671	29617	66	25456	9345	2458	21925	333604
1966	243864	31863	66	25555	10758	2941	22046	337793
1967	271530	35625	66	23661	9536	2471	21782	364671
1968	299984	38988	67	18904	12015	3858	21987	396403
1969	320533	41843	62	13029	13926	4337	22993	416723
1970	350272	46613	65	10384	14371	4777	22823	449305
1971	381257	49626	73	5466	8481	2961	22218	470282
1972	422030	55263	61	5139	7146	2214	22417	514270
1973	426796	61311	49	4089	12480	3585	24527	532837
1974	433846	68390	67	3073	12957	4284	25681	548498
1975	409987	68529	84	3329	10235	3189	20649	516002
1976	414674	75692	96	3483	7041	2634	22613	526233
1977	420469	80247	84	8132	9167	2969	23227	544295
1978	414910	83299	82	7824	11570	3618	25827	547130
1979	421204	84474	91	12852	14948	4370	22796	560735
1980	417649	87617	78	13851	12212	4492	44656	580555
1981	383339	89799	68	10512	6960	3755	48211	543244

TABLE B-21 REFINED PETROLEUM PRODUCTS CONSUMPTION IN THE RESIDENTIAL SECTOR OF THE ATLANTIC REGION, 1961-1981

TERAJOULES

YEAR	MOTOR GASOLINE	DIESEL FUEL	KEROSENE	LIGHT FUEL OIL	HEAVY FUEL OIL	LIQUID PETROLEUM GAS	PETROLEUM COKE	STILL GAS	AVIATION GASOLINE	AVIATION TURBO FUEL	CRUDE OIL	TOTAL
1961	0	0	18485	29746	0	951	0	0	0	0	0	49182
1962	0	0	18162	32554	0	1067	0	0	0	0	0	51783
1963	0	0	19592	37139	33	1257	0	0	0	0	0	58021
1964	0	0	20681	42013	27	1683	0	0	0	0	0	64404
1965	0	0	21835	43420	53	1226	0	0	0	0	0	66534
1966	0	0	20059	40759	398	1140	0	0	0	0	0	62356
1967	0	0	22644	46769	126	1680	0	0	0	0	0	71219
1968	0	0	23536	52190	66	1769	0	0	0	0	0	77561
1969	0	0	21609	54556	325	1028	0	0	0	0	0	77518
1970	0	0	25135	65305	278	1062	0	0	0	0	0	91781
1971	0	0	23925	69570	729	1896	0	0	0	0	0	96120
1972	0	0	25398	84240	862	2241	0	0	0	0	0	112741
1973	0	0	22286	81143	2075	1956	0	0	0	0	0	107460
1974	0	0	21896	85866	2367	2297	0	0	0	0	0	112426
1975	0	0	18592	74524	3076	2751	0	0	0	0	0	98943
1976	0	0	16683	73368	444	2747	0	0	0	0	0	93242
1977	0	0	14648	69841	338	2721	0	0	0	0	0	87548
1978	0	0	12647	65686	880	1905	0	0	0	0	0	81118
1979	0	0	10746	60946	650	1940	0	0	0	0	0	74282
1980	0	0	10273	63505	631	2054	0	0	0	0	0	76464
1981	0	0	7747	52840	902	1770	0	0	0	0	0	63259

TABLE B-22 REFINED PETROLEUM PRODUCTS CONSUMPTION IN THE COMMERCIAL SECTOR OF THE ATLANTIC REGION, 1961-1981

TERAJOULES

YEAR	MOTOR GASOLINE	DIESEL FUEL	KEROSENE	LIGHT FUEL OIL	HEAVY FUEL OIL	LIQUID PETROLEUM GAS	PETROLEUM COKE	STILL GAS	AVIATION GASOLINE	AVIATION TURBO FUEL	CRUDE OIL	TOTAL
1961	0	2384	1221	4327	10185	0	0	0	0	0	0	18117
1962	0	2618	1347	4910	11073	0	0	0	0	0	0	19948
1963	0	2452	1149	5494	11809	0	0	0	0	0	0	20904
1964	0	2372	1101	5212	16941	0	0	0	0	0	0	25626
1965	0	3589	1538	8813	16351	0	0	0	0	0	0	30291
1966	0	3189	2454	9102	17697	0	0	0	0	0	0	32442
1967	0	2734	2754	10824	22995	0	0	0	0	0	0	39307
1968	0	2957	3406	15561	26582	0	0	0	0	0	0	48506
1969	0	3257	1203	10675	34201	0	0	0	0	0	0	49336
1970	0	3380	359	9833	32159	0	0	0	0	0	0	45731
1971	0	3779	467	9526	40447	0	0	0	0	0	0	54219
1972	0	3687	527	13336	37795	0	0	0	0	0	0	55345
1973	0	6151	794	12955	16404	0	0	0	0	0	0	36304
1974	0	7152	874	10651	25694	0	0	0	0	0	0	44371
1975	0	6526	1155	12820	19991	0	0	0	0	0	0	40492
1976	0	8769	1245	16982	15867	0	0	0	0	0	0	42863
1977	0	10458	1491	15432	21211	0	0	0	0	0	0	48592
1978	0	7026	2381	20744	12081	843	0	0	0	0	0	43075
1979	0	5415	2279	19325	10936	971	0	0	0	0	0	38926
1980	0	5471	1870	19580	13017	1027	0	0	0	0	0	40965
1981	0	6251	1607	18768	9872	1497	0	0	0	0	0	37995

TABLE B-23 REFINED PETROLEUM PRODUCTS CONSUMPTION IN THE INDUSTRIAL SECTOR OF THE ATLANTIC REGION, 1961-1981

TERAJOULES

YEAR	MOTOR GASOLINE	DIESEL FUEL	KEROSENE	LIGHT FUEL OIL	HEAVY FUEL OIL	LIQUID PETROLEUM GAS	PETROLEUM COKE	STILL GAS	AVIATION GASOLINE	AVIATION TURBO FUEL	CRUDE OIL	TOTAL
1961	1966	3263	634	2990	21311	622	0	6570	0	0	61	
1962	1823	3472	719	2895	24786	240	0	6975	0	0	73	
1963	3106	3466	521	713	23191	373	0	9187	0	0	81	
1964	3712	5567	611	1818	25362	556	0	10257	0	0	61	
1965	5006	5106	545	2876	26874	958	0	9366	0	0	61	
1966	6917	7079	778	2372	30051	1400	0	9754	0	0	61	
1967	7639	7779	736	2981	24706	1049	0	9589	0	0	61	
1968	9327	8627	874	2894	24918	1440	1266	8832	0	0	61	
1969	7969	8025	3059	3397	37940	2174	1892	10956	0	0	77	
1970	6558	8916	2161	4893	44452	2485	1812	12061	0	0	42	
1971	6636	9316	2760	4646	56188	1970	1724	13904	0	0	49	
1972	7270	9658	2981	6509	54139	1738	1845	17220	0	0	55	
1973	7892	10870	1269	7179	75649	1792	2384	19758	0	0	61	
1974	8751	13021	1826	10220	57793	1740	2290	20568	0	0	69	
1975	8591	12707	2225	8163	62674	1703	1616	19620	0	0	47	
1976	7617	8007	2245	5796	76016	4304	1879	18566	0	0	31	
1977	7363	8916	1107	7682	88215	4184	1859	20409	0	0	31	
1978	6912	10990	617	6064	81635	3979	2007	20124	0	0	31	
1979	6996	11820	461	5430	72168	3962	3650	21057	0	0	31	
1980	6931	11310	341	5498	68541	5691	2347	21639	0	0	31	
1981	4523	13203	206	4682	64446	4619	3073	15772	0	0	15	

TABLE B-24 REFINED PETROLEUM PRODUCTS CONSUMPTION IN THE TRANSPORTATION SECTOR OF THE ATLANTIC REGION, 1961-1981

TERAJOULES

YEAR	MOTOR GASOLINE	DIESEL FUEL	KEROSENE	LIGHT FUEL OIL	HEAVY FUEL OIL	LIQUID PETROLEUM GAS	PETROLEUM COKE	STILL GAS	AVIATION GASOLINE	AVIATION TURBO FUEL	CRUDE OIL	TOTAL
1961	39471	13654	120	74	17942	0	0	0	3752	4169	0	
1962	42511	14550	335	86	16506	0	0	0	3443	4317	0	
1963	42952	15411	90	221	20449	0	0	0	2935	5254	0	
1964	45661	17924	108	209	18816	0	0	0	2676	5562	0	
1965	48057	20099	229	197	19421	0	0	0	2393	6259	0	
1966	50084	21015	229	289	20595	0	0	0	1951	6492	0	
1967	51939	22552	229	240	22292	0	0	0	2034	7070	0	
1968	55954	26237	192	615	24162	0	0	0	1732	8164	0	
1969	60056	25531	108	1092	21981	0	0	0	1520	8440	0	
1970	66524	27430	108	689	24421	0	0	0	1450	8755	0	
1971	68566	29640	156	1426	23897	0	0	0	1572	9483	0	
1972	79101	31609	162	1519	28856	0	0	0	1687	10774	0	
1973	84570	29340	138	2083	28386	0	0	0	1407	12284	0	
1974	90204	30393	126	2483	24049	0	0	0	1253	12482	0	
1975	93096	28844	138	633	17127	0	0	0	1206	12112	0	
1976	95171	30410	0	0	11624	0	0	0	1258	13749	0	
1977	97276	31050	0	0	9606	0	0	0	1139	14402	0	
1978	101925	31419	0	0	9299	0	0	0	1194	14161	0	
1979	106253	37625	0	0	22658	0	0	0	1081	14312	0	
1980	105320	38365	0	0	16723	0	0	0	682	14762	0	
1981	100688	35930	0	0	19457	0	0	0	465	15173	0	

TABLE 8-25 ENERGY CONSUMPTION IN THE RESIDENTIAL SECTOR OF THE ATLANTIC REGION, 1961-1981

YEAR	REFINED PETROLEUM PRODUCTS	ELECTRICITY	NATURAL GAS	COAL	COKE	COKE OVEN GAS	WOOD	TOTAL
				TERAJOULES				
1961	49082	3999	80	11840	393	0	13080	78474
1962	51783	4403	76	10981	314	0	12113	79670
1963	58021	4666	62	10188	314	0	10832	84083
1964	64604	5044	64	9974	314	0	9915	89915
1965	66534	5404	60	9167	262	0	8860	90287
1966	62356	5868	49	7783	197	0	7881	84334
1967	71219	6617	42	7693	183	0	7454	93209
1968	77181	7387	41	6434	131	0	6575	97749
1969	77518	8050	35	4892	78	0	5751	96324
1970	91780	8820	34	4233	52	0	5244	110163
1971	96120	9907	33	2645	26	0	5274	114005
1972	112761	11657	30	3358	0	0	4917	132723
1973	107460	13028	19	2366	0	0	4360	127233
1974	112226	15322	17	1960	183	0	4184	133892
1975	98943	17902	19	1624	0	0	4114	122602
1976	93242	20218	17	1325	0	0	4114	119116
1977	87548	21157	16	1431	0	0	5227	115379
1978	81318	21949	14	1276	0	0	5927	110484
1979	74282	22327	16	1302	0	0	10706	108633
1980	76463	23033	17	1409	0	0	12298	113221
1981	63259	23468	12	1409	0	0	15593	103741

TABLE 8-26 ENERGY CONSUMPTION IN THE COMMERCIAL SECTOR OF THE ATLANTIC REGION, 1961-1981

YEAR	REFINED PETROLEUM PRODUCTS	ELECTRICITY	NATURAL GAS	COAL	COKE	COKE OVEN GAS	WOOD	TOTAL
				TERAJOULES				
1961	18117	2448	10	6998	0	0	0	27573
1962	19948	2671	14	6674	0	0	0	29307
1963	20904	3038	21	6251	0	0	0	30214
1964	25626	3614	2	5852	0	0	0	35094
1965	30291	3841	6	5368	0	0	0	39506
1966	32442	4705	17	4646	0	0	0	41810
1967	39367	5019	24	4413	0	0	0	48823
1968	48506	5605	26	3855	0	0	0	57992
1969	49336	6851	27	3297	0	0	0	59511
1970	45731	7758	31	2849	0	0	0	56369
1971	54219	8953	40	2141	0	0	0	65353
1972	55345	9868	21	877	0	0	0	66111
1973	36294	10422	30	791	0	0	0	47537
1974	44371	11315	50	821	0	0	0	56557
1975	40492	13237	65	739	0	0	0	54533
1976	42763	13559	79	927	0	0	0	57328
1977	48592	13957	68	877	0	0	0	63494
1978	43075	14285	68	850	0	0	0	58278
1979	38927	14980	75	1010	0	0	0	54992
1980	40945	16179	61	904	0	0	0	58089
1981	36995	16798	56	921	0	0	13	55783

TABLE B-27 ENERGY CONSUMPTION IN THE INDUSTRIAL SECTOR OF THE ATLANTIC REGION, 1961-1981

YEAR	REFINED PETROLEUM PRODUCTS	ELECTRICITY	NATURAL GAS	COAL	COKE	COKE OVEN GAS	WOOD RESIDUE	TOTAL
				TERAJOULES				
1961	37507	11822	0	13729	8324	2262	10034	
1962	40982	13082	0	10582	9293	2210	10462	
1963	40604	15145	0	11493	10811	2745	10992	
1964	47944	17297	0	11225	10313	2855	12183	
1965	51192	20372	0	10363	9083	2458	13065	
1966	48412	21290	0	12619	10575	2641	14745	
1967	54539	22990	0	11113	8403	2471	14328	
1968	57239	25996	0	8216	11884	3659	15412	
1969	74935	26942	0	4548	13948	4997	17209	
1970	93381	30035	0	2982	14319	4777	17179	
1971	97193	30766	0	388	8455	2961	16944	
1972	100415	32638	0	612	7146	2314	17200	
1973	125834	37861	0	612	12460	3525	20167	
1974	116258	41753	0	292	12774	4284	21497	
1975	117397	37490	0	916	10235	3089	16535	
1976	126461	42916	0	1431	7041	2234	19504	
1977	139806	45133	0	5974	9162	2099	20400	
1978	132359	47164	0	5528	11570	3026	19700	
1979	125575	47167	0	10550	14948	4370	22000	
1980	123389	48406	0	11538	12212	4497	31500	
1981	112502	49533	0	9172	6950	3755	32600	

TABLE B-28 ENERGY CONSUMPTION IN THE TRANSPORTATION SECTOR OF THE ATLANTIC REGION, 1961-1981

YEAR	REFINED PETROLEUM PRODUCTS	ELECTRICITY	NATURAL GAS	COAL	COKE	COKE OVEN GAS	WOOD	TOTAL
				TERAJOULES				
1961	79182	0	0	1989	0	0	0	
1962	83748	0	0	1542	0	0	0	
1963	87213	0	0	1117	0	0	0	
1964	90958	0	0	1037	0	0	0	
1965	96654	0	0	553	0	0	0	
1966	100654	0	0	505	0	0	0	
1967	106405	0	0	452	0	0	0	
1968	117058	0	0	399	0	0	0	
1969	118744	0	0	292	0	0	0	
1970	129380	0	0	320	0	0	0	
1971	133725	0	0	292	0	0	0	
1972	153509	0	0	292	0	0	0	
1973	157208	0	0	320	0	0	0	
1974	160991	0	0	0	0	0	0	
1975	153155	0	0	0	0	0	0	
1976	152208	0	0	0	0	0	0	
1977	152523	0	0	0	0	0	0	
1978	160158	0	0	0	0	0	0	
1979	182420	0	0	0	0	0	0	
1980	176852	0	0	0	0	0	0	
1981	170581	0	0	0	0	0	0	

C. NET ENERGY USE

TERAJOULES

TABLE C-1 NET ENERGY CONSUMPTION IN THE RESIDENTIAL SECTOR OF THE ATLANTIC REGION, 1961-1981

YEAR	TERAJOULES				
	REFINED PETROLEUM PRODUCTS	ELECTRICITY	NATURAL GAS	SOLID FUEL	TOTAL
1961	30140	3989	60	12657	46846
1962	31949	4403	57	11705	48114
1963	5685	4666	47	10692	51290
1964	40117	5044	48	10102	55311
1965	41195	5404	45	9145	55789
1966	8699	5868	37	7975	52579
1967	44215	6617	32	7661	58525
1968	47964	7387	31	6571	61953
1969	46377	8050	26	5377	61830
1970	57292	8820	26	4815	70953
1971	60384	9907	25	3973	74289
1972	71112	11657	23	4088	86880
1973	68127	13028	14	3363	84532
1974	71342	15322	13	3164	89841
1975	63190	17902	14	2869	83875
1976	59280	20218	13	2720	82231
1977	55764	21157	12	3380	80313
1978	51994	21949	11	4102	77956
1979	47500	22327	12	6004	75843
1980	48974	23033	13	7403	79423
1981	40656	23468	9	8502	72635

TABLE C-2 NET ENERGY CONSUMPTION IN THE COMMERCIAL SECTOR OF THE ATLANTIC REGION, 1961-1981

YEAR	TERAJOULES				
	REFINED PETROLEUM PRODUCTS	ELECTRICITY	NATURAL GAS	SOLID FUEL	TOTAL
1961	13246	2448	8	4549	20251
1962	14591	2671	11	4338	21611
1963	15458	3038	16	4063	22575
1964	19275	3614	2	3804	26695
1965	22394	3841	5	3489	29729
1966	24367	4705	13	3021	32106
1967	30208	5018	19	2888	38113
1968	37499	5605	20	2506	45630
1969	37850	6851	21	2143	46865
1970	34862	7758	24	1852	44496
1971	41421	8953	31	1392	51797
1972	42452	9968	24	570	53014
1973	25804	10422	23	514	36763
1974	31651	11315	39	534	43539
1975	28953	13237	51	513	42754
1976	29575	13558	62	603	43798
1977	33251	13957	53	570	47831
1978	30901	14285	53	553	45792
1979	28468	14983	59	557	44154
1980	30046	16178	48	588	46860
1981	26410	16798	44	514	43366

1 SOLID FUEL INCLUDES COAL, COKE AND WOOD

TABLE C-3 NET ENERGY CONSUMPTION IN THE INDUSTRIAL SECTOR OF THE ATLANTIC REGION, 1961-1981

YEAR	TERAJOULES					
	REFINED PETROLEUM PRODUCTS	ELECTRICITY	NATURAL GAS	COAL, COKE AND COKE OVEN GAS	WOOD RESIDUE	TOTAL
1961	28997	11822	0	21109	6020	67948
1962	31990	13082	0	19255	6277	70604
1963	30877	15145	0	21738	6595	74355
1964	35491	17287	0	20910	7310	80998
1965	37683	20372	0	19007	7839	84901
1966	32785	21290	0	22679	8619	85373
1967	37187	22990	0	19079	8597	87853
1968	38563	25996	0	20766	9247	94572
1969	54385	26942	0	20159	10325	111811
1970	62065	30035	0	19112	10307	121519
1971	73741	30766	0	10211	10166	124884
1972	76355	33638	0	8716	10320	129029
1973	96724	37861	0	14417	12100	161104
1974	86290	41753	0	15008	12898	155949
1975	87680	37490	0	12327	9921	147418
1976	99174	42916	0	9270	11702	163062
1977	110328	45133	0	14857	12240	182558
1978	103001	47164	0	17447	11820	179432
1979	96558	47157	0	25899	13200	182824
1980	94966	48406	0	24484	18900	186756
1981	84801	49533	0	16357	19560	170251

TABLE C-4 NET ENERGY CONSUMPTION IN THE TRANSPORTATION SECTOR OF THE ATLANTIC REGION, 1961-1981

YEAR	TERAJOULES									
	MOTOR GASOLINE	DIESEL FUEL	KEROSENE	LIGHT FUEL OIL	HEAVY FUEL OIL	AVIATION GASOLINE	AVIATION TURBO FUEL	SUM REFINED PETROLEUM	COAL	TOTAL
1961	7894	2503	66	38	2958	750	1251	15460	158	15618
1962	8502	2633	184	71	3030	689	1295	16404	123	16527
1963	8590	2725	50	71	3036	567	1576	16615	89	16704
1964	9132	3257	59	105	3057	535	1669	17814	83	17897
1965	9611	3701	125	95	3528	479	1878	19417	45	19462
1966	10017	3719	125	91	3619	390	1948	19909	43	19952
1967	10388	3936	125	99	3899	417	2121	20985	38	21023
1968	11191	4562	106	270	3447	346	2450	22372	32	22404
1969	12011	4534	59	583	2091	324	2532	22134	23	22157
1970	13305	5060	59	463	2820	290	2628	24625	25	24650
1971	13713	5241	86	1005	2830	314	2840	26029	23	26052
1972	15820	5637	89	639	4214	297	3233	29929	23	29952
1973	16914	5085	76	1549	3471	281	3885	31061	26	31087
1974	18041	5413	69	1558	2598	251	3745	31675	0	31675
1975	18619	5619	76	196	2253	241	3634	30638	0	30638
1976	19034	6065	0	0	1161	262	4124	30636	0	30636
1977	19455	6248	0	0	860	238	4321	31122	0	31122
1978	20397	6416	0	0	940	239	4848	32840	0	32840
1979	21251	7686	0	0	2266	213	4445	35861	0	35861
1980	21264	7599	0	0	1477	174	4188	34702	0	34702

TABLE C-5 NET ENERGY CONSUMPTION BY PRODUCT IN THE ATLANTIC REGION, 1961-1981

TERAJOULES

YEAR	REFINED PETROLEUM PRODUCTS	ELECTRICITY	NATURAL GAS	SOLID FUEL*	TOTAL
1961	87843	18259	68	44493	150662
1962	94934	20156	68	41698	156856
1963	98835	22849	63	43177	164924
1964	112697	25945	50	42209	180901
1965	120689	29617	50	39525	189930
1966	115760	31863	50	42334	190008
1967	132595	34625	51	38241	205512
1968	146398	38988	51	39122	224559
1969	162746	41843	47	39027	242664
1970	178844	46613	50	36112	261619
1971	201575	49626	56	25765	277023
1972	219848	55263	47	23717	298875
1973	221716	61311	37	30422	313486
1974	220958	68390	52	31604	321004
1975	210461	68529	65	25630	304685
1976	218665	78692	75	24295	319727
1977	230465	80247	65	31047	341824
1978	218636	83398	64	33922	336020
1979	208387	84474	71	45760	338692
1980	209087	87617	61	51375	348140
1981	185706	89799	53	45033	320591

* SOLID FUEL INCLUDES COAL, COKE, COKE OVEN GAS, WOOD AND WOOD RESIDUE

TABLE C-6 NET ENERGY CONSUMPTION BY SECTOR IN THE ATLANTIC REGION, 1961-1981

TERAJOULES

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION	TOTAL
1961	46946	20251	67948	15517	150662
1962	48114	21511	70604	16527	156856
1963	51290	22575	74355	16704	164924
1964	55311	26695	80998	17897	180901
1965	55789	29729	84901	19451	189930
1966	52579	32106	85373	19950	190008
1967	58525	38113	87853	21021	205512
1968	61953	45630	94572	22404	224559
1969	61830	46965	111311	22158	242664
1970	70953	44496	121519	24651	261619
1971	74299	51797	124994	26053	277023
1972	86880	53014	129029	29952	298875
1973	84532	36763	161104	31087	313486
1974	85841	42539	155949	31675	321004
1975	83975	42754	147418	30538	304685
1976	92231	43798	163062	30636	319727
1977	80313	47831	182558	31122	341824
1978	77956	45792	179432	32840	336020
1979	75843	44164	182924	35961	338692
1980	79423	46860	186756	35101	348140
1981	72635	43966	170251	33839	320591

TABLE C-7 PERCENTAGE DISTRIBUTION OF NET ENERGY CONSUMPTION IN THE RESIDENTIAL SECTOR OF THE ATLANTIC REGION, 1961-1981

YEAR	REFINED PETROLEUM PRODUCTS	ELECTRICITY	NATURAL GAS	SOLID FUEL*	TOTAL
1961	64.34	8.52	0.13	27.02	100.00
1962	66.40	9.15	0.12	24.33	100.00
1963	69.96	9.10	0.09	20.85	100.00
1964	72.53	9.12	0.09	18.26	100.00
1965	73.84	8.00	0.08	16.39	100.00
1966	73.60	11.16	0.07	15.17	100.00
1967	75.55	11.31	0.05	13.09	100.00
1968	77.42	11.92	0.05	10.61	100.00
1969	78.24	13.02	0.04	8.70	100.00
1970	80.75	12.43	0.04	6.79	100.00
1971	81.29	13.34	0.03	5.35	100.00
1972	81.85	13.42	0.03	4.71	100.00
1973	80.59	15.41	0.02	3.98	100.00
1974	79.41	17.05	0.01	3.52	100.00
1975	75.34	21.22	0.02	3.42	100.00
1976	72.09	24.59	0.02	3.31	100.00
1977	69.43	26.34	0.01	4.21	100.00
1978	66.57	28.16	0.01	5.26	100.00
1979	62.63	29.44	0.02	7.92	100.00
1980	61.66	29.00	0.02	9.32	100.00
1981	55.97	32.31	0.01	11.71	100.00

TABLE C-8 PERCENTAGE DISTRIBUTION OF NET ENERGY CONSUMPTION IN THE COMMERCIAL SECTOR OF THE ATLANTIC REGION, 1961-1981

YEAR	REFINED PETROLEUM PRODUCTS	ELECTRICITY	NATURAL GAS	SOLID FUEL*	TOTAL
1961	65.41	12.09	0.04	22.46	100.00
1962	67.52	12.36	0.05	20.07	100.00
1963	68.47	13.46	0.07	18.00	100.00
1964	72.20	13.54	0.01	14.25	100.00
1965	75.33	12.92	0.02	11.74	100.00
1966	75.90	14.65	0.04	9.41	100.00
1967	79.25	13.17	0.05	7.52	100.00
1968	82.18	12.29	0.04	5.49	100.00
1969	80.76	14.62	0.04	4.57	100.00
1970	78.35	17.44	0.05	4.16	100.00
1971	79.97	17.28	0.06	2.69	100.00
1972	80.08	18.80	0.05	1.08	100.00
1973	70.19	28.35	0.06	1.40	100.00
1974	72.70	25.99	0.09	1.23	100.00
1975	67.72	30.96	0.12	1.20	100.00
1976	67.53	30.96	0.14	1.38	100.00
1977	69.52	29.18	0.11	1.19	100.00
1978	67.48	31.20	0.12	1.21	100.00
1979	64.46	33.92	0.13	1.49	100.00
1980	64.12	34.52	0.10	1.25	100.00
1981	60.21	38.29	0.10	1.40	100.00

* SOLID FUEL INCLUDES COAL, COKE AND WOOD

TABLE C-9 PERCENTAGE DISTRIBUTION OF NET ENERGY CONSUMPTION IN THE INDUSTRIAL SECTOR OF THE ATLANTIC REGION, 1961-1981

YEAR	REFINED PETROLEUM PRODUCTS	ELECTRICITY	NATURAL GAS	COAL, COKE AND COKE OVEN GAS	WOOD RESIDUE	TOTAL
1961	42.68	17.40	0.00	31.07	8.86	100.00
1962	45.31	18.53	0.00	27.27	8.89	100.00
1963	41.53	20.37	0.00	29.24	8.87	100.00
1964	43.82	21.34	0.00	25.82	9.02	100.00
1965	44.38	24.00	0.00	22.39	9.23	100.00
1966	38.40	24.94	0.00	26.56	10.10	100.00
1967	42.33	26.17	0.00	21.72	9.79	100.00
1968	40.78	27.49	0.00	21.96	9.78	100.00
1969	48.64	24.10	0.00	18.03	9.23	100.00
1970	51.07	24.72	0.00	15.73	8.48	100.00
1971	59.05	24.64	0.00	8.18	8.14	100.00
1972	59.18	26.07	0.00	6.76	8.00	100.00
1973	60.04	23.50	0.00	8.95	7.51	100.00
1974	55.33	26.77	0.00	9.62	8.27	100.00
1975	59.49	25.43	0.00	8.36	6.73	100.00
1976	60.82	26.32	0.00	5.68	7.18	100.00
1977	60.43	24.72	0.00	8.14	6.70	100.00
1978	57.40	26.29	0.00	9.72	6.59	100.00
1979	52.81	25.80	0.00	14.17	7.22	100.00
1980	50.85	25.92	0.00	13.11	10.12	100.00
1981	49.81	29.09	0.00	9.61	11.49	100.00

TABLE C-10 PERCENTAGE DISTRIBUTION OF NET ENERGY CONSUMPTION IN THE TRANSPORTATION SECTOR OF THE ATLANTIC REGION, 196[illegible]

YEAR	MOTOR GASOLINE	DIESEL FUEL	KEROSENE	LIGHT FUEL OIL	HEAVY FUEL OIL	AVIATION GASOLINE	AVIATION TURBO FUEL	SUM REFINED PETROLEUM	COAL	TOTAL
1961	50.54	16.03	0.42	0.24	18.94	4.80	8.01	99.99	1.01	100.00
1962	51.44	15.93	1.11	0.43	19.33	4.17	7.84	99.26	0.74	100.00
1963	51.42	16.31	0.30	0.43	18.18	3.39	9.43	99.47	0.53	100.00
1964	51.03	18.20	0.33	0.59	17.08	2.99	9.33	99.54	0.46	100.00
1965	49.38	19.02	0.64	0.49	18.13	2.46	9.65	99.77	0.23	100.00
1966	50.21	18.64	0.63	0.46	18.14	1.95	9.76	99.80	0.20	100.00
1967	49.42	18.72	0.59	0.47	18.55	1.98	10.09	99.83	0.17	100.00
1968	49.95	20.36	0.47	1.21	15.39	1.54	10.94	99.86	0.14	100.00
1969	54.21	20.46	0.27	2.63	9.44	1.46	11.43	99.90	0.10	100.00
1970	53.97	20.53	0.24	1.88	11.44	1.18	10.65	99.89	0.11	100.00
1971	52.64	20.12	0.33	3.86	10.86	1.21	10.90	99.91	0.09	100.00
1972	52.82	18.82	0.30	2.13	14.07	0.99	10.79	99.92	0.08	100.00
1973	54.41	16.36	0.24	4.98	11.17	0.90	11.85	99.92	0.08	100.00
1974	56.96	17.09	0.22	4.92	8.20	0.79	11.82	100.00	0.00	100.00
1975	60.77	18.34	0.25	0.64	7.35	0.79	11.86	100.00	0.00	100.00
1976	62.13	19.80	0.00	0.00	3.79	0.82	13.46	100.00	0.00	100.00
1977	62.51	20.08	0.00	0.00	2.76	0.76	13.88	100.00	0.00	100.00
1978	62.11	19.54	0.00	0.00	2.86	0.73	14.76	100.00	0.00	100.00
1979	59.26	21.43	0.00	0.00	5.32	0.59	12.40	100.00	0.00	100.00
1980	60.58	21.65	0.00	0.00	4.77	0.39	12.62	100.00	0.00	100.00
1981	59.51	21.31	0.00	0.00	5.45	0.27	13.45	100.00	0.00	100.00

TABLE C-11 PERCENTAGE DISTRIBUTION OF NET ENERGY CONSUMPTION BY PRODUCT IN THE ATLANTIC REGION, 1961-1981

YEAR	REFINED PETROLEUM PRODUCTS	ELECTRICITY	NATURAL GAS	SOLID FUEL	TOTAL
1961	58.30	12.12	0.05	29.53	100.00
1962	60.52	12.85	0.04	26.58	100.00
1963	59.93	13.85	0.04	26.18	100.00
1964	62.30	14.34	0.03	23.33	100.00
1965	63.56	15.60	0.03	20.82	100.00
1966	60.92	16.77	0.03	22.28	100.00
1967	64.52	16.85	0.02	18.61	100.00
1968	65.19	17.36	0.02	17.42	100.00
1969	67.07	17.24	0.02	15.67	100.00
1970	68.36	17.82	0.02	13.80	100.00
1971	72.76	17.91	0.02	9.30	100.00
1972	73.56	18.49	0.02	7.94	100.00
1973	70.73	19.56	0.01	9.70	100.00
1974	68.83	21.31	0.02	9.85	100.00
1975	69.07	22.49	0.02	8.41	100.00
1976	68.39	23.99	0.02	7.60	100.00
1977	67.42	23.48	0.02	9.08	100.00
1978	65.07	24.82	0.02	10.10	100.00
1979	61.53	24.94	0.02	13.51	100.00
1980	60.06	25.17	0.02	14.76	100.00
1981	57.93	28.01	0.02	14.05	100.00

‡ SOLID FUEL INCLUDES COAL, COKE, COKE OVEN GAS, WOOD AND WOOD RESIDUE

TABLE C-12 PERCENTAGE DISTRIBUTION OF NET ENERGY CONSUMPTION BY SECTOR IN THE ATLANTIC REGION, 1961-1981

YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION	TOTAL
1961	31.09	13.44	45.10	10.37	100.00
1962	30.67	13.78	45.01	10.54	100.00
1963	31.10	13.69	45.08	10.13	100.00
1964	30.58	14.76	44.77	9.89	100.00
1965	29.39	15.66	44.71	10.25	100.00
1966	27.67	16.90	44.93	10.50	100.00
1967	28.48	18.55	42.75	10.23	100.00
1968	27.59	20.32	42.11	9.98	100.00
1969	25.48	19.31	46.08	9.13	100.00
1970	27.12	17.01	46.45	9.42	100.00
1971	26.82	18.70	45.08	9.40	100.00
1972	29.07	17.74	43.17	10.02	100.00
1973	26.97	11.73	51.39	9.92	100.00
1974	27.99	13.56	48.58	9.87	100.00
1975	27.53	14.03	48.38	10.06	100.00
1976	25.72	13.70	51.00	9.58	100.00
1977	23.50	13.99	53.41	9.10	100.00
1978	23.20	13.63	53.40	9.77	100.00
1979	22.39	13.04	53.98	10.59	100.00
1980	22.81	13.46	53.64	10.08	100.00
1981	22.66	13.68	53.11	10.56	100.00

TABLE C-13 NET ENERGY CONSUMPTION IN THE RESIDENTIAL SECTOR OF THE ATLANTIC REGION, 1961-1981
NET ENERGY CONSUMPTION PER CAPITA, PER HOUSEHOLD, PER $1000 REAL PDI

YEAR	GIGAJOULES		
	PER CAPITA	PER HOUSEHOLD	PER $1000 PDI
1961	24.7	111.6	17.8
1962	25.0	112.4	17.5
1963	26.4	117.9	18.1
1964	28.2	125.7	18.6
1965	28.3	125.6	17.8
1966	26.6	117.1	15.9
1967	29.4	127.8	16.8
1968	30.9	131.7	16.9
1969	30.5	128.1	16.2
1970	34.8	144.3	17.9
1971	36.1	147.1	17.4
1972	41.9	167.3	18.6
1973	40.2	157.2	16.5
1974	42.3	161.7	16.5
1975	39.0	145.8	14.3
1976	37.7	137.5	13.5
1977	36.5	130.8	12.8
1978	35.3	124.2	12.1
1979	34.2	117.9	11.7
1980	35.6	120.4	12.4
1981	32.5	107.7	11.1

TABLE C-14 NET ENERGY CONSUMPTION IN THE ATLANTIC REGION, 1961-1981
NET ENERGY CONSUMPTION PER $1000 REAL INDUSTRIAL OUTPUT, PER CAPITA, PER $1000 REAL GDP

YEAR	GIGAJOULES		
	INDUSTRIAL	TOTAL	
	PER $1000 REAL OUTPUT	PER CAPITA	PER $1000 GDP
1961	64.0	79.4	44.8
1962	63.4	81.4	44.8
1963	63.2	84.8	45.2
1964	64.0	92.4	45.9
1965	62.4	96.5	45.4
1966	58.5	96.2	43.1
1967	60.1	103.4	45.0
1968	59.5	111.8	45.8
1969	56.6	119.7	46.1
1970	55.6	128.5	47.6
1971	57.7	134.7	48.6
1972	70.6	144.2	49.2
1973	79.1	149.1	48.0
1974	70.9	151.3	48.9
1975	68.4	141.6	45.4
1976	73.4	146.5	45.1
1977	82.6	155.5	47.2
1978	78.5	152.0	44.4
1979	74.9	152.6	42.3
1980	78.5	156.1	48.2
1981	69.7	143.5	42.4

D. ENERGY PRICES

TABLE D-1 NOMINAL ENERGY PRICES IN THE ATLANTIC REGION, 1961-1981

YEAR	MOTOR GASOLINE	HEATING OIL	FUEL OIL	COAL	ELECTRICITY			
	CENTS	PER	LITRE	$ PER SHORT TON	CENTS PER KWH RESIDENTIAL NORMAL USE	RESIDENTIAL SPACE HEATING	COMMERCIAL	INDUSTRIAL
1961	9.3	3.9	1.7	11.4	2.1	1.4	3.1	0.7
1962	9.4	3.9	1.7	11.4	2.2	1.4	3.1	0.7
1963	9.4	3.9	1.7	10.5	1.9	1.5	3.0	0.7
1964	9.6	4.0	1.7	9.1	1.9	1.5	3.0	0.7
1965	9.7	3.9	1.7	9.2	1.9	1.5	3.0	0.8
1966	9.8	3.9	1.7	9.3	1.8	1.4	3.0	0.8
1967	10.0	4.0	1.7	9.1	1.8	1.4	3.0	0.8
1968	10.3	4.0	1.7	9.0	1.8	1.3	3.0	0.7
1969	10.6	4.2	1.7	11.8	1.8	1.3	3.1	0.7
1970	10.8	4.2	1.7	11.6	1.8	1.3	3.1	0.7
1971	11.2	4.9	1.9	14.5	1.8	1.3	3.0	0.8
1972	11.3	5.3	2.1	15.5	1.8	1.3	3.1	0.8
1973	12.0	6.2	2.7	14.6	1.8	1.3	2.9	0.8
1974	13.9	7.7	5.0	23.5	1.9	1.3	3.0	1.0
1975	15.9	8.6	5.8	32.0	2.0	1.4	3.5	1.3
1976	17.7	9.7	6.2	37.9	2.7	2.1	3.8	1.4
1977	19.2	11.4	7.6	42.8	3.0	2.3	4.5	1.7
1978	20.0	12.8	8.8	45.9	3.9	2.9	5.3	1.9
1979	21.9	14.4	10.3	47.9	4.4	3.4	5.9	2.5
1980	25.9	17.5	13.3	54.1	5.0	3.8	6.2	2.7
1981	35.3	25.0	---	---	5.2	3.9	6.5	---

TABLE D-2 REAL ENERGY PRICES IN THE ATLANTIC REGION, 1961-1981

DOLLARS PER EFFECTIVE GJ

YEAR	MOTOR GASOLINE	HEATING OIL	FUEL OIL	COAL	ELECTRICITY			
					RESIDENTIAL NORMAL USE	RESIDENTIAL SPACE HEATING	COMMERCIAL	INDUSTRIAL
1961	17.9	2.1	0.7	0.7	7.9	5.2	11.4	2.6
1962	17.9	2.0	0.6	0.7	8.0	5.1	11.3	2.6
1963	17.6	2.0	0.6	0.6	7.0	5.2	10.8	2.5
1964	17.6	2.0	0.7	0.5	6.7	5.4	10.4	2.5
1965	17.4	1.9	0.6	0.5	6.5	5.2	10.2	2.6
1966	16.9	1.9	0.6	0.5	6.0	4.5	9.8	2.7
1967	16.7	1.8	0.6	0.5	5.8	4.3	9.5	2.6
1968	16.5	1.8	0.6	0.4	5.6	4.1	9.3	2.2
1969	16.2	1.8	0.5	0.6	5.3	4.0	9.0	2.1
1970	16.0	1.7	0.5	0.5	5.1	3.8	8.7	2.0
1971	16.2	1.9	0.6	0.6	5.0	3.6	8.4	2.2
1972	15.6	2.0	0.6	0.7	4.9	3.4	8.1	2.1
1973	15.4	2.2	0.7	0.6	4.5	3.2	7.1	2.0
1974	16.0	2.4	1.2	0.8	4.2	3.0	6.6	2.2
1975	16.6	2.5	1.2	1.0	3.9	2.8	7.0	2.6
1976	17.1	2.6	1.2	1.1	5.1	3.9	7.2	2.6
1977	17.2	2.8	1.4	1.2	5.1	3.9	7.7	2.9
1978	16.5	2.9	1.5	1.2	6.1	4.5	8.4	3.0
1979	16.5	3.0	1.6	1.1	6.4	5.0	8.6	3.6
1980	17.7	3.3	1.9	1.1	6.5	5.0	8.2	3.6
1981	21.5	4.2	---	---	6.1	4.6	7.6	---

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POOR

QUALITY

ORIGINAL